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W05068

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TOTAL # PAGES IN DOCUMENT	159

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160 pages

Analytical Data Package Prepared For
Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 34185

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05068	W07-011	B1L6W0	J6K180149-1	JJ2NX1AA	9JJ2NX10	6331331
		B1L6W0	J6K180149-1	JJ2NX1AC	9JJ2NX10	6331348
		B1L6W0	J6K180149-1	JJ2NX1AD	9JJ2NX10	6331340
		B1L6W0	J6K180149-1	JJ2NX1AE	9JJ2NX10	6331335
		B1L760	J6K180149-2	JJ2N21AA	9JJ2N210	6331331
		B1L760	J6K180149-2	JJ2N21AC	9JJ2N210	6331348
		B1L760	J6K180149-2	JJ2N21AD	9JJ2N210	6331339
		B1L760	J6K180149-2	JJ2N21AE	9JJ2N210	6331335
		B1L6Y4	J6K180149-3	JJ2N91AA	9JJ2N910	6331331
		B1L6Y4	J6K180149-3	JJ2N91AC	9JJ2N910	6331348
		B1L6Y4	J6K180149-3	JJ2N91AD	9JJ2N910	6331351
		B1L6Y4	J6K180149-3	JJ2N91AE	9JJ2N910	6331339
		B1L6Y4	J6K180149-3	JJ2N91AF	9JJ2N910	6331335
		B1L6X0	J6K180149-4	JJ2PK1AA	9JJ2PK10	6331331
		B1L6X0	J6K180149-4	JJ2PK1AC	9JJ2PK10	6331340

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Report Nbr: 34185

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05068	W07-011	B1L6X0	J6K180149-4	JJ2PK1AD	9JJ2PK10	6331335
		B1L6V5	J6K180149-5	JJ2TP1AA	9JJ2TP10	6331331
		B1L6V5	J6K180149-5	JJ2TP1AC	9JJ2TP10	6331348
		B1L6V5	J6K180149-5	JJ2TP1AD	9JJ2TP10	6331339
		B1L6V5	J6K180149-5	JJ2TP1AE	9JJ2TP10	6331335
		B1L715	J6K180149-6	JJ2TT1AA	9JJ2TT10	6331331
		B1L715	J6K180149-6	JJ2TT1AC	9JJ2TT10	6331340
		B1L715	J6K180149-6	JJ2TT1AD	9JJ2TT10	6331335
		B1L799	J6K180164-1	JJ2VD1AA	9JJ2VD10	6331331
		B1L799	J6K180164-1	JJ2VD1AC	9JJ2VD10	6331345
		B1L799	J6K180164-1	JJ2VD1AD	9JJ2VD10	6331346
		B1L799	J6K180164-1	JJ2VD1AE	9JJ2VD10	6331339
		B1L623	J6K180164-2	JJ2VN1AA	9JJ2VN10	6331331
		B1L623	J6K180164-2	JJ2VN1AC	9JJ2VN10	6331345
		B1L623	J6K180164-2	JJ2VN1AD	9JJ2VN10	6331346
		B1L623	J6K180164-2	JJ2VN1AE	9JJ2VN10	6331348
		B1L623	J6K180164-2	JJ2VN1AF	9JJ2VN10	6331339
		B1L619	J6K180164-3	JJ2V11AA	9JJ2V110	6331331
		B1L619	J6K180164-3	JJ2V11AC	9JJ2V110	6331345
		B1L619	J6K180164-3	JJ2V11AD	9JJ2V110	6331346
		B1L619	J6K180164-3	JJ2V11AE	9JJ2V110	6331348
		B1L619	J6K180164-3	JJ2V11AG	9JJ2V110	6331338
		B1L619	J6K180164-3	JJ2V11AH	9JJ2V110	6331351
		B1L619	J6K180164-3	JJ2V11AJ	9JJ2V110	6331339
		B1L619	J6K180164-3	JJ2V11AM	9JJ2V110	6360197
		B1L634	J6K180164-4	JJ2WH1AA	9JJ2WH10	6331331

Comments:

Report Nbr: 34185

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05068	W07-011	B1L634	J6K180164-4	JJ2WH1AC	9JJ2WH10	6331352
		B1L634	J6K180164-4	JJ2WH1AD	9JJ2WH10	6331339
		B1L627	J6K180164-5	JJ2WR1AA	9JJ2WR10	6331331
		B1L627	J6K180164-5	JJ2WR1AC	9JJ2WR10	6331345
		B1L627	J6K180164-5	JJ2WR1AE	9JJ2WR10	6331348
		B1L627	J6K180164-5	JJ2WR1AF	9JJ2WR10	6331352
		B1L627	J6K180164-5	JJ2WR1AG	9JJ2WR10	6331339
		B1L627	J6K180164-5	JJ2WR3AD	9JJ2WR30	7003498
		B1L626	J6K180164-6	JJ2W41AA	9JJ2W410	6331331
		B1L626	J6K180164-6	JJ2W41AC	9JJ2W410	6331345
		B1L626	J6K180164-6	JJ2W41AD	9JJ2W410	6331346
		B1L626	J6K180164-6	JJ2W41AE	9JJ2W410	6331348
		B1L626	J6K180164-6	JJ2W41AF	9JJ2W410	6331352
		B1L626	J6K180164-6	JJ2W41AG	9JJ2W410	6331339
		B1L615	J6K180164-7	JJ2XD1AA	9JJ2XD10	6331331
		B1L615	J6K180164-7	JJ2XD1AC	9JJ2XD10	6331345
		B1L615	J6K180164-7	JJ2XD1AD	9JJ2XD10	6331346
		B1L615	J6K180164-7	JJ2XD1AE	9JJ2XD10	6331348
		B1L615	J6K180164-7	JJ2XD1AG	9JJ2XD10	6331338
		B1L615	J6K180164-7	JJ2XD1AH	9JJ2XD10	6331351
		B1L615	J6K180164-7	JJ2XD1AJ	9JJ2XD10	6331339
		B1L615	J6K180164-7	JJ2XD1AK	9JJ2XD10	6360197
	I07-011	B1L2W4	J6K210219-2	JJ6KT1AA	9JJ6KT10	6331335
		B1L2R8	J6K210219-3	JJ6K21AA	9JJ6K210	6331335
		B1L2T4	J6K210219-4	JJ6K81AA	9JJ6K810	6331335
	S07-011	B1L3X4	J6K210263-1	JJ6201AA	9JJ62010	6331331

Comments:

Report Nbr: 34185

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05068	S07-011	B1L3X7	J6K210263-2	JJ6231AA	9JJ62310	6331331
		B1L3X1	J6K210263-3	JJ6261AA	9JJ62610	6331331

Comments:

STL Richland
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Richland, WA 99354

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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

January 12, 2007

Attention: Dot Stewart

SAF Number	:	W07-011, I07-011, S07-011
Date SDG Closed	:	November 20, 2006
Number of Samples	:	Nineteen (19)
Sample Type	:	Water
SDG Number	:	W05068
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between November 17, 2006 and November 20, 2006, nineteen water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1L6W0	JJ2NX	WATER	11/17/06
B1L760	JJ2N2	WATER	11/17/06
B1L6Y4	JJ2N9	WATER	11/17/06
B1L6X0	JJ2PK	WATER	11/17/06
B1L6V5	JJ2TP	WATER	11/17/06
B1L715	JJ2TT	WATER	11/17/06
B1L799	JJ2VD	WATER	11/17/06
B1L623	JJ2VN	WATER	11/17/06
B1L619	JJ2V1	WATER	11/17/06
B1L634	JJ2WH	WATER	11/17/06
B1L627	JJ2WR	WATER	11/17/06
B1L626	JJ2W4	WATER	11/17/06
B1L615	JJ2XD	WATER	11/17/06

B1L2W4	JJ6KT	WATER	11/17/06
B1L2R8	JJ6K2	WATER	11/20/06
B1L2T4	JJ6K8	WATER	11/20/06
B1L3X4	JJ620	WATER	11/20/06
B1L3X7	JJ623	WATER	11/20/06
B1L3X1	JJ626	WATER	11/20/06

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065

Technetium-99 by method RICH-RC-5078

Tritium by method RICH-RC-5007

Nickel 63 by method RICH-RC-5069

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

Reduced volumes were analyzed based on elevated screen results for samples B1L619, B1L623, B1L626, B1L615 and B1L619 DUP. Due to a slightly higher count rate in the background of the alpha detector the MDA was not quite met on the duplicate, but it was on the sample itself. The MDA achieved was 3.27 pCi/l. The sample result was greater than the MDA. Except as noted, the LCS, batch blank, samples and sample duplicate (B1L619) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The duplicates were out on this batch and a recount did not help. The sample and duplicate were reanalyzed with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1L627) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1L6Y4) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

The LCS, batch blank, samples and sample duplicate (B1L626) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

BATCH 6331352

The LCS, batch blank, samples and sample duplicate (B1L627) results are within contractual requirements.

BATCH 6334470

On December 21, 2006 STL Richland proposed to analyze samples B1L619 and B1L615 by method I129LL_SEP_LEPS_GS_LL rather than by method I129LL_ETVDSK_SEP_GS as was requested on the chain of custody. Proposal was accepted on 12/21/06 by email and IRF (PNNL Tracking Number: 07-1).

The LCS, batch blank, samples and sample duplicate (B1L619) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1L799), and sample matrix spike (B1L623) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:

The LCS, batch blank, samples, sample duplicate (B1L715), and sample matrix spike (B1L6X0) results are within contractual requirements.

Pacific Northwest National Laboratories
January 12, 2007

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1L3X4) results are within contractual requirements.

Nickel 63 by method RICH-RC-5069

The LCS, batch blank, samples and sample duplicate (B1L619) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The blanks recoveries were very low. The blanks were recounted and a matrix spike was added to the sample on the second count to meet the parameters. Samples B1L6Y4 and B1L6V5 had results greater than the calibration limit. They were recounted at a smaller aliquot with good results. Data is accepted. Except as noted, the LCS, batch blank, samples, sample duplicate (B1L6W0), and sample matrix spike (B1L760) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:



Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,...)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation $(\text{Result}/\text{Expected}) - 1$ as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c - Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c the combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgrndCnt}/\text{BkgrndCntMin}) / \text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \text{Sqrt}((\text{BkgrndCnt}/\text{BkgrndCntMin}) / \text{SCntMin}) + 2.71 / \text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S - D) / [\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeaIV\Rad\W05068.Edd, h:\Reportdb\edd\FeaIV\Rad\34185.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2N210	B1L760		MW6-SBB-A1	W07-011	W05068					11/17/2006 08:58				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	4.14E+03	pCi/L	2.4E+02	3.1E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/16/2006 19:55	I
6331348	BE-7	13966-02-4	7.04E+00	pCi/L	2.7E+01	2.7E+01	U	5.07E+01		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	CO-60	10198-40-0	2.60E+01	pCi/L	9.1E+00	9.1E+00		4.66E+00		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	CS-134	13967-70-9	-1.43E+00	pCi/L	2.9E+00	2.9E+00	U	5.02E+00		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	CS-137	10045-97-3	-3.79E+00	pCi/L	2.5E+00	2.5E+00	U	3.57E+00		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	EU-152	14683-23-9	-1.63E+00	pCi/L	5.4E+00	5.4E+00	U	9.34E+00		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	EU-154	15585-10-1	-2.45E+00	pCi/L	7.3E+00	7.3E+00	U	1.30E+01		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	EU-155	14391-16-3	3.00E+00	pCi/L	3.8E+00	3.8E+00	U	7.23E+00		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	K-40	13966-00-2	4.34E+00	pCi/L	4.9E+01	4.9E+01	U	1.08E+02		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	RU-106	13967-48-1	1.45E+01	pCi/L	2.2E+01	2.2E+01	U	4.25E+01		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331348	SB-125	14234-35-6	-2.49E+00	pCi/L	6.1E+00	6.1E+00	U	1.05E+01		GAMMALL_GS	2.0003E+00	L	12/27/2006 05:31	I
6331339	TC-99	14133-76-7	1.20E+04	pCi/L	5.9E+01	8.2E+02		9.78E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	12/21/2006 21:05	I
6331335	Uranium	7440-61-1	2.14E+01	ug/L	2.5E+00	2.5E+00		8.19E-02		UTOT_KPA	2.56E-02	ML	01/03/2007 10:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2N910	B1L6Y4		MW6-SBB-A1	W07-011	W05068					11/17/2006 09:46				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	4.69E+03	pCi/L	2.5E+02	3.3E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/16/2006 21:17	I
6331348	BE-7	13966-02-4	1.25E+01	pCi/L	2.8E+01	2.8E+01	U	5.39E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	CO-60	10198-40-0	3.49E-01	pCi/L	2.0E+00	2.0E+00	U	4.24E+00		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	CS-134	13967-70-9	-3.65E-01	pCi/L	2.4E+00	2.4E+00	U	4.46E+00		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	CS-137	10045-97-3	-1.31E+00	pCi/L	2.3E+00	2.3E+00	U	3.87E+00		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	EU-152	14683-23-9	-1.08E+00	pCi/L	5.8E+00	5.8E+00	U	1.03E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	EU-154	15585-10-1	2.33E+00	pCi/L	4.9E+00	4.9E+00	U	1.14E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	EU-155	14391-16-3	4.87E+00	pCi/L	5.0E+00	5.0E+00	U	9.58E+00		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	K-40	13966-00-2	-3.40E+01	pCi/L	4.4E+01	4.4E+01	U	9.45E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	RU-106	13967-48-1	-2.26E+00	pCi/L	2.0E+01	2.0E+01	U	3.73E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331348	SB-125	14234-35-6	2.52E+00	pCi/L	5.7E+00	5.7E+00	U	1.09E+01		GAMMALL_GS	1.9998E+00	L	12/27/2006 05:31	I
6331351	SR-90	10098-97-2	1.15E-01	pCi/L	1.6E-01	1.7E-01	U	3.62E-01	75.3	SRISO_SEP_PRE	1.0043E+00	L	12/31/2006 08:18	I
6331339	TC-99	14133-76-7	3.07E+03	pCi/L	3.0E+01	2.1E+02		9.84E+00	100.0	TC99_ETVDSK_LS	1.249E-01	L	12/21/2006 21:05	I

STL Richland U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeaRadSummaryEdd v3.48 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

6331335	Uranium	7440-61-1	2.19E+02	ug/L	2.6E+01	2.6E+01	8.22E-02	UTOT_KPA	2.55E-02	ML	01/05/2007 14:18	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:		
9JJ2NX10	B1L6W0		MW6-SBB-A1	W07-011	W05068					11/17/2006 08:19		

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	7.43E+03	pCi/L	3.0E+02	4.4E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/16/2006 18:33	I
6331348	BE-7	13966-02-4	1.67E+01	pCi/L	2.9E+01	2.9E+01	U	5.53E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	CO-60	10198-40-0	7.01E+01	pCi/L	1.3E+01	1.3E+01		4.49E+00		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	CS-134	13967-70-9	1.78E+00	pCi/L	3.3E+00	3.3E+00	U	6.37E+00		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	CS-137	10045-97-3	-7.91E-01	pCi/L	2.5E+00	2.5E+00	U	4.52E+00		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	EU-152	14683-23-9	2.84E-01	pCi/L	6.1E+00	6.1E+00	U	1.12E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	EU-154	15585-10-1	1.22E+00	pCi/L	7.7E+00	7.7E+00	U	1.51E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	EU-155	14391-16-3	6.14E-01	pCi/L	5.0E+00	5.0E+00	U	8.80E+00		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	K-40	13966-00-2	-3.57E+01	pCi/L	4.4E+01	4.4E+01	U	9.90E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	RU-106	13967-48-1	-1.59E+01	pCi/L	2.2E+01	2.2E+01	U	3.74E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331348	SB-125	14234-35-6	3.51E+00	pCi/L	6.0E+00	6.0E+00	U	1.16E+01		GAMMALL_GS	1.9996E+00	L	12/27/2006 05:31	I
6331340	TC-99	14133-76-7	2.08E+04	pCi/L	7.8E+01	1.2E+03		9.84E+00	100.0	TC99_SEP_LSC	1.253E-01	L	12/23/2006 06:30	I
6331335	Uranium	7440-61-1	5.05E+00	ug/L	5.3E-01	5.3E-01		8.28E-02		UTOT_KPA	2.53E-02	ML	01/03/2007 10:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2PK10	B1L6X0		MW6-SBB-A1	W07-011	W05068					11/17/2006 11:02				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.36E+04	pCi/L	3.9E+02	6.7E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/16/2006 22:39	I
6331340	TC-99	14133-76-7	1.32E+02	pCi/L	7.4E+00	1.3E+01		9.84E+00	100.0	TC99_SEP_LSC	1.254E-01	L	12/23/2006 06:30	I
6331335	Uranium	7440-61-1	1.51E+02	ug/L	1.6E+01	1.6E+01		2.10E+00		UTOT_KPA	0.00E+00	ML	01/03/2007 10:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2TP10	B1L6V5		MW6-SBB-A1	W07-011	W05068					11/17/2006 11:48				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	5.10E+03	pCi/L	2.6E+02	3.5E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006	I
6331348	BE-7	13966-02-4	1.17E+01	pCi/L	2.1E+01	2.1E+01	U	4.31E+01		GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	CO-60	10198-40-0	8.79E+00	pCi/L	3.4E+00	3.4E+00	U	8.07E+00		GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	CS-134	13967-70-9	-2.56E-01	pCi/L	2.3E+00	2.3E+00	U	4.23E+00		GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

rptFeadRadSummaryEdd v3.48

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	Version:	05	Rpt Nbr:	34185	File Name:	h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd				
6331348	CS-137	10045-97-3	7.51E-01	pCi/L	2.1E+00	2.1E+00	U	4.13E+00	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	EU-152	14683-23-9	1.76E+00	pCi/L	4.7E+00	4.7E+00	U	8.95E+00	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	EU-154	15585-10-1	2.96E+00	pCi/L	3.0E+00	3.0E+00	U	8.87E+00	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	EU-155	14391-16-3	-1.87E+00	pCi/L	4.0E+00	4.0E+00	U	6.69E+00	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	K-40	13966-00-2	-5.95E+00	pCi/L	3.0E+01	3.0E+01	U	6.32E+01	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	RU-106	13967-48-1	-1.10E+01	pCi/L	1.8E+01	1.8E+01	U	2.98E+01	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331348	SB-125	14234-35-6	-2.05E+00	pCi/L	4.6E+00	4.6E+00	U	7.85E+00	GAMMALL_GS	2.003E+00	L	12/27/2006 05:32	I
6331339	TC-99	14133-76-7	3.41E+03	pCi/L	3.2E+01	2.4E+02		9.77E+00 100.0	TC99_ETVDSK_LS	1.261E-01	L	12/21/2006 21:05	I
6331335	Uranium	7440-61-1	2.19E+02	ug/L	2.6E+01	2.6E+01		8.15E-02	UTOT_KPA	2.57E-02	ML	01/05/2007 14:25	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2TT10	B1L715		MW6-SBB-A1	W07-011	W05068					11/17/2006 13:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.30E+03	pCi/L	1.7E+02	2.0E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 01:22	I
6331340	TC-99	14133-76-7	1.23E+01	pCi/L	4.5E+00	6.4E+00		9.85E+00	100.0	TC99_SEP_LSC	1.252E-01	L	12/23/2006 06:30	I
6331335	Uranium	7440-61-1	3.26E+00	ug/L	3.4E-01	3.4E-01		8.19E-02		UTOT_KPA	2.56E-02	ML	01/03/2007 10:59	I

Lab Sample Id:	Client id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2V110	B1L619		MW6-SBB-A1	W07-011	W05068					11/17/2006 11:05				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.76E+06	pCi/L	4.2E+03	6.5E+04		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 09:33	I
6331345	ALPHA	12587-46-1	1.35E+00	pCi/L	1.6E+00	1.6E+00	U	2.91E+00	100.0	9310_ALPHABETA	7.51E-02	L	12/29/2006 15:29	I
6331346	BETA	12587-47-2	1.58E+03	pCi/L	2.1E+01	3.3E+02		4.75E+00	100.0	9310_ALPHABETA	7.73E-02	L	12/29/2006 16:26	I
6331348	BE-7	13966-02-4	-8.43E+00	pCi/L	1.8E+01	1.8E+01	U	3.11E+01		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	CO-60	10198-40-0	2.21E+00	pCi/L	3.2E+00	3.2E+00	U	3.62E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	CS-134	13967-70-9	-6.66E-01	pCi/L	1.7E+00	1.7E+00	U	3.06E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	CS-137	10045-97-3	-1.11E-01	pCi/L	1.7E+00	1.7E+00	U	3.04E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	EU-152	14683-23-9	-7.37E-01	pCi/L	4.0E+00	4.0E+00	U	6.86E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	EU-154	15585-10-1	6.60E-01	pCi/L	4.8E+00	4.8E+00	U	9.40E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	EU-155	14391-16-3	1.33E+00	pCi/L	3.0E+00	3.0E+00	U	5.72E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	K-40	13966-00-2	-9.23E+00	pCi/L	3.5E+01	3.5E+01	U	7.35E+01		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	RU-106	13967-48-1	-7.28E+00	pCi/L	1.3E+01	1.3E+01	U	2.30E+01		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I
6331348	SB-125	14234-35-6	-1.29E+00	pCi/L	3.6E+00	3.6E+00	U	6.30E+00		GAMMALL_GS	1.9995E+00	L	12/27/2006 05:32	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

6360197	I-129L	15046-84-1	3.95E+01	pCi/L	4.2E+00	4.2E+00		4.92E-01	86.5	I129LL_SEP_LEPS	3.9223E+00	L	01/03/2007	19:06	I
6331338	NI-63	13981-37-8	8.36E+02	pCi/L	7.9E+00	5.7E+01		3.21E+00	103.4	NI63_LSC	4.015E-01	L	12/23/2006	00:17	I
6331351	SR-90	10098-97-2	-4.27E-02	pCi/L	2.1E-01	2.1E-01	U	4.98E-01	60.3	SRISO_SEP_PRE	1.0064E+00	L	12/31/2006	08:18	I
6331339	TC-99	14133-76-7	7.56E+03	pCi/L	4.7E+01	5.2E+02		9.80E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	12/21/2006	21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2VD10	B1L799		MW6-SBB-A1	W07-011	W05068					11/17/2006 13:02				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.37E+03	pCi/L	1.7E+02	2.0E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 02:44	I
6331345	ALPHA	12587-46-1	1.02E+00	pCi/L	1.1E+00	1.1E+00	U	1.66E+00	100.0	9310_ALPHABETA	2.014E-01	L	12/29/2006 18:51	I
6331346	BETA	12587-47-2	1.75E+01	pCi/L	2.4E+00	3.3E+00		3.05E+00	100.0	9310_ALPHABETA	1.998E-01	L	12/29/2006 15:35	I
6331339	TC-99	14133-76-7	6.72E+01	pCi/L	6.0E+00	1.0E+01		9.77E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	12/21/2006 21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2VN10	B1L623		MW6-SBB-A1	W07-011	W05068					11/17/2006 12:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	5.07E+03	pCi/L	2.6E+02	3.5E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 04:05	I
6331345	ALPHA	12587-46-1	1.15E+00	pCi/L	1.2E+00	1.2E+00	U	2.06E+00	100.0	9310_ALPHABETA	1.877E-01	L	12/29/2006 18:51	I
6331346	BETA	12587-47-2	2.73E+01	pCi/L	2.7E+00	4.4E+00		2.71E+00	100.0	9310_ALPHABETA	2.01E-01	L	12/29/2006 15:35	I
6331348	BE-7	13966-02-4	1.58E+01	pCi/L	2.1E+01	2.1E+01	U	4.18E+01		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	CO-60	10198-40-0	1.62E+00	pCi/L	2.0E+00	2.0E+00	U	4.29E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	CS-134	13967-70-9	9.76E-01	pCi/L	1.5E+00	1.5E+00	U	3.13E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	CS-137	10045-97-3	-2.95E-01	pCi/L	1.8E+00	1.8E+00	U	3.19E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	EU-152	14683-23-9	1.56E+00	pCi/L	4.4E+00	4.4E+00	U	8.12E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	EU-154	15585-10-1	1.99E+00	pCi/L	5.1E+00	5.1E+00	U	1.04E+01		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	EU-155	14391-16-3	-1.98E+00	pCi/L	3.7E+00	3.7E+00	U	6.18E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	K-40	13966-00-2	1.80E+00	pCi/L	2.8E+01	2.8E+01	U	6.01E+01		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	RU-106	13967-48-1	3.88E+00	pCi/L	1.5E+01	1.5E+01	U	2.84E+01		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331348	SB-125	14234-35-6	2.43E+00	pCi/L	4.1E+00	4.1E+00	U	7.97E+00		GAMMALL_GS	2.00E+00	L	12/27/2006 05:32	I
6331339	TC-99	14133-76-7	9.54E+01	pCi/L	6.7E+00	1.2E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	12/21/2006 21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:
9JJ2W410	B1L626		MW6-SBB-A1	W07-011	W05068					11/17/2006 08:31

STL Richland
 rptFeadRadSummaryEdd v3.48
 U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	4.07E+04	pCi/L	6.5E+02	1.7E+03		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 13:39	I
6331345	ALPHA	12587-46-1	9.62E-01	pCi/L	8.9E-01	9.2E-01	U	1.50E+00	100.0	9310_ALPHABETA	1.465E-01	L	12/29/2006 15:29	I
6331346	BETA	12587-47-2	1.95E+02	pCi/L	7.4E+00	2.6E+01		3.51E+00	100.0	9310_ALPHABETA	1.597E-01	L	12/29/2006 15:35	I
6331348	BE-7	13966-02-4	-5.89E+00	pCi/L	2.8E+01	2.8E+01	U	4.97E+01		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	CO-60	10198-40-0	-2.24E-01	pCi/L	2.4E+00	2.4E+00	U	4.64E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	CS-134	13967-70-9	2.24E-01	pCi/L	2.8E+00	2.8E+00	U	5.24E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	CS-137	10045-97-3	7.67E-01	pCi/L	2.3E+00	2.3E+00	U	4.42E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	EU-152	14683-23-9	-2.93E+00	pCi/L	5.7E+00	5.7E+00	U	9.60E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	EU-154	15585-10-1	-2.31E+00	pCi/L	7.2E+00	7.2E+00	U	1.30E+01		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	EU-155	14391-16-3	-3.33E+00	pCi/L	4.8E+00	4.8E+00	U	7.95E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	K-40	13966-00-2	-5.14E+01	pCi/L	5.0E+01	5.0E+01	U	1.12E+02		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	RU-106	13967-48-1	1.06E+01	pCi/L	2.3E+01	2.3E+01	U	4.44E+01		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331348	SB-125	14234-35-6	4.95E-01	pCi/L	4.9E+00	4.9E+00	U	9.28E+00		GAMMALL_GS	1.9502E+00	L	12/27/2006 07:15	I
6331352	I-129L	15046-84-1	2.08E+00	pCi/L	4.9E-01	4.9E-01		3.45E-01	92.7	I129LL_SEP_LEPS	3.8976E+00	L	01/03/2007 17:00	I
6331339	TC-99	14133-76-7	9.07E+02	pCi/L	1.7E+01	6.7E+01		9.82E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	12/21/2006 21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2WH10	B1L634		MW6-SBB-A1	W07-011	W05068					11/17/2006 09:35				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	4.94E+03	pCi/L	2.6E+02	3.4E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 10:55	I
6331352	I-129L	15046-84-1	-3.17E-02	pCi/L	1.8E-01	1.8E-01	U	3.12E-01	89.2	I129LL_SEP_LEPS	3.8468E+00	L	01/03/2007 15:15	I
6331339	TC-99	14133-76-7	1.63E+02	pCi/L	8.0E+00	1.7E+01		9.75E+00	100.0	TC99_ETVDSK_LS	1.264E-01	L	12/21/2006 21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2WR10	B1L627		MW6-SBB-A1	W07-011	W05068					11/17/2006 07:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	9.38E+01	pCi/L	1.3E+02	1.4E+02	U	3.12E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 12:17	I
6331345	ALPHA	12587-46-1	1.22E-01	pCi/L	3.6E-01	3.6E-01	U	9.07E-01	100.0	9310_ALPHABETA	1.995E-01	L	12/29/2006 18:51	I
6331348	BE-7	13966-02-4	1.29E-01	pCi/L	2.8E+01	2.8E+01	U	4.92E+01		GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	CO-60	10198-40-0	9.74E-01	pCi/L	2.7E+00	2.7E+00	U	5.18E+00		GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	CS-134	13967-70-9	-1.69E-01	pCi/L	2.3E+00	2.3E+00	U	4.22E+00		GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	CS-137	10045-97-3	-9.05E-01	pCi/L	2.3E+00	2.3E+00	U	3.88E+00		GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual - Analyte was found in the associated laboratory blank above the MDC.

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

6331348	EU-152	14683-23-9	-5.92E+00	pCi/L	6.4E+00	6.4E+00	U	1.01E+01	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	EU-154	15585-10-1	-6.77E-01	pCi/L	7.1E+00	7.1E+00	U	1.30E+01	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	EU-155	14391-16-3	-5.22E+00	pCi/L	5.8E+00	5.8E+00	U	9.33E+00	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	K-40	13966-00-2	3.12E+01	pCi/L	6.8E+01	6.8E+01	U	4.12E+01	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	RU-106	13967-48-1	-9.52E+00	pCi/L	2.2E+01	2.2E+01	U	3.73E+01	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331348	SB-125	14234-35-6	-2.10E-01	pCi/L	5.9E+00	5.9E+00	U	1.04E+01	GAMMALL_GS	2.0072E+00	L	12/27/2006 05:32	I
6331352	I-129L	15046-84-1	-1.44E-01	pCi/L	1.4E-01	1.4E-01	U	2.28E-01	92.4 I129LL_SEP_LEPS	3.819E+00	L	01/03/2007 15:16	I
6331339	TC-99	14133-76-7	-3.50E-01	pCi/L	4.0E+00	5.7E+00	U	9.80E+00	100.0 TC99_ETVDSK_LS	1.259E-01	L	12/21/2006 21:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2WR30	B1L627		MW6-SBB-A1	W07-011	W05068					11/17/2006 07:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7003498	BETA	12587-47-2	2.73E-01	pCi/L	1.3E+00	1.3E+00	U	2.88E+00	100.0	9310_ALPHABETA	2.016E-01	L	01/09/2007 12:33	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ2XD10	B1L615		MW6-SBB-A1	W07-011	W05068					11/17/2006 10:14				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.61E+05	pCi/L	1.3E+03	6.1E+03		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 15:00	I
6331345	ALPHA	12587-46-1	2.65E+00	pCi/L	1.4E+00	1.6E+00		1.81E+00	100.0	9310_ALPHABETA	1.257E-01	L	12/29/2006 15:29	I
6331346	BETA	12587-47-2	6.06E+02	pCi/L	1.4E+01	8.0E+01		3.91E+00	100.0	9310_ALPHABETA	1.404E-01	L	12/29/2006 15:35	I
6331348	BE-7	13966-02-4	8.29E+00	pCi/L	2.6E+01	2.6E+01	U	4.96E+01		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	CO-60	10198-40-0	6.64E-01	pCi/L	2.3E+00	2.3E+00	U	4.87E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	CS-134	13967-70-9	9.38E-01	pCi/L	2.2E+00	2.2E+00	U	4.51E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	CS-137	10045-97-3	1.83E-01	pCi/L	2.1E+00	2.1E+00	U	4.07E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	EU-152	14683-23-9	9.01E-01	pCi/L	5.3E+00	5.3E+00	U	9.68E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	EU-154	15585-10-1	6.51E-01	pCi/L	5.4E+00	5.4E+00	U	1.12E+01		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	EU-155	14391-16-3	-3.92E+00	pCi/L	3.8E+00	3.8E+00	U	5.83E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	K-40	13966-00-2	-1.52E+01	pCi/L	4.6E+01	4.6E+01	U	1.01E+02		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	RU-106	13967-48-1	-5.94E+00	pCi/L	1.9E+01	1.9E+01	U	3.30E+01		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6331348	SB-125	14234-35-6	-2.82E+00	pCi/L	4.9E+00	4.9E+00	U	8.34E+00		GAMMALL_GS	2.0051E+00	L	12/27/2006 07:15	I
6360197	I-129L	15046-84-1	4.52E+00	pCi/L	7.6E-01	7.6E-01		3.13E-01	95.7	I129LL_SEP_LEPS	3.8555E+00	L	01/03/2007 19:07	I
6331338	NI-63	13981-37-8	1.63E+02	pCi/L	3.6E+00	1.3E+01		3.16E+00	102.2	NI63_LSC	4.006E-01	L	12/23/2006 03:41	I
6331351	SR-90	10098-97-2	-8.63E-02	pCi/L	1.3E-01	1.4E-01	U	3.50E-01	80.6	SRISO_SEP_PRE	1.0056E+00	L	12/31/2006 08:18	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

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rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

1/12/2007 2:40:03 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34185 File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

6331339 TC-99 14133-76-7 2.52E+03 pCi/L 2.7E+01 1.8E+02 9.81E+00 100.0 TC99_ETVDSK_LS 1.258E-01 L 12/21/2006 21:05 I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ62010	B1L3X4		MW6-SBB-A1	S07-011	W05068					11/20/2006 11:03				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	2.55E+04	pCi/L	5.2E+02	1.1E+03		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 16:22	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ62310	B1L3X7		MW6-SBB-A1	S07-011	W05068					11/20/2006 11:49				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	4.44E+03	pCi/L	2.5E+02	3.2E+02		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 19:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ62610	B1L3X1		MW6-SBB-A1	S07-011	W05068					11/20/2006 10:15				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331331	H-3	10028-17-8	1.78E+04	pCi/L	4.4E+02	8.3E+02		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	12/17/2006 20:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ6K210	B1L2R8		MW6-SBB-A1	I07-011	W05068					11/20/2006 09:42				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331335	Uranium	7440-61-1	2.56E+00	ug/L	2.7E-01	2.7E-01		8.28E-02		UTOT_KPA	2.53E-02	ML	01/03/2007 11:03	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ6K810	B1L2T4		MW6-SBB-A1	I07-011	W05068					11/20/2006 09:04				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331335	Uranium	7440-61-1	4.48E+00	ug/L	4.7E-01	4.7E-01		8.06E-02		UTOT_KPA	2.60E-02	ML	01/03/2007 11:05	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JJ6KT10	B1L2W4		MW6-SBB-A1	I07-011	W05068					11/20/2006 10:29				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6331335	Uranium	7440-61-1	1.16E+00	ug/L	1.2E-01	1.2E-01		8.19E-02		UTOT_KPA	2.56E-02	ML	01/03/2007 11:01	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDE31AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/20/2006 11:03

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/20/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331331	H-3	-1.29E+01	pCi/L	1.4E+02	U	3.06E+02	100.0		906.0_H3_LSC	5.00E-03	12/16/2006				D
BLK	10028-17-8			1.3E+02							15:50				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDE31DX

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/20/2006 11:03

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/20/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331331	H-3	5.35E+01	pCi/L	1.4E+02	U	3.13E+02	100.0		906.0_H3_LSC	5.00E-03	12/17/2006				D
BLK	10028-17-8			1.3E+02						L	06:49				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
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Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDE81AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331335 BLK	Uranium 7440-61-1	0.00E+00	ug/L	0.0E+00 0.0E+00	U	2.10E-01			UTOT_KPA	2.63E-02 ML	01/03/2007 10:31				D

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDF01AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									BP	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331346 BLK	BETA 12587-47-2	1.36E+00	pCi/L	9.7E-01 9.5E-01	U	1.78E+00	100.0		9310_ALPHAB	2.018E-01 L	12/29/2006 16:26				D

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\W05068.Edd, h:\Reportdb\eddd\Fead\W05068.Edd, h:\Reportdb\eddd\Fead\W05068.Edd, h:\Reportdb\eddd\Fead\W05068.Edd

Lab Sample Id: JKDF41AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:31

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BR	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331348	BE-7	-1.92E+00	pCi/L	2.2E+01	U	4.05E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	13966-02-4			2.2E+01						L	07:16				
6331348	CO-60	3.40E-01	pCi/L	1.9E+00	U	4.12E+00			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	10198-40-0			1.9E+00						L	07:16				
6331348	CS-134	-5.00E-01	pCi/L	1.9E+00	U	3.48E+00			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	13967-70-9			1.9E+00						L	07:16				
6331348	CS-137	6.84E-01	pCi/L	2.3E+00	U	4.36E+00			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	10045-97-3			2.3E+00						L	07:16				
6331348	EU-152	3.40E+00	pCi/L	5.4E+00	U	1.03E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	14683-23-9			5.4E+00						L	07:16				
6331348	EU-154	-2.68E-01	pCi/L	5.2E+00	U	1.04E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	15585-10-1			5.2E+00						L	07:16				
6331348	EU-155	-1.43E+00	pCi/L	3.8E+00	U	6.49E+00			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	14391-16-3			3.8E+00						L	07:16				
6331348	K-40	-6.40E+00	pCi/L	2.7E+01	U	5.85E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	13966-00-2			2.7E+01						L	07:16				
6331348	RU-106	-2.68E+00	pCi/L	2.0E+01	U	3.54E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	13967-48-1			2.0E+01						L	07:16				
6331348	SB-125	3.97E+00	pCi/L	5.3E+00	U	1.03E+01			GAMMALL_GS	2.0004E+00	12/27/2006				D
BLK	14234-35-6			5.3E+00						L	07:16				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JKDFH1AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331338	NI-63	6.85E+00	pCi/L	2.9E+00		3.53E+00	90.1		NI63_LSC	3.999E-01	12/23/2006				D
BLK	13981-37-8			1.6E+00							05:24				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDFL1AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 13:02

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331339	TC-99	3.67E+00	pCi/L	6.0E+00	U	9.86E+00	100.0		TC99_ETVDSK	1.254E-01	12/21/2006				D
BLK	14133-76-7			4.2E+00						L	21:05				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDFR1AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 13:00

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331340	TC-99	2.20E+00	pCi/L	5.8E+00	U	9.80E+00	100.0		TC99_SEP_LS	1.259E-01	12/23/2006				D
BLK	14133-76-7			4.1E+00							06:30				

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JKDFV1AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331345	ALPHA	1.22E-01	pCi/L	2.9E-01	U	6.46E-01	100.0		9310_ALPHAB	2.001E-01	12/29/2006				D
BLK	12587-46-1			2.9E-01						L	15:29				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDGC1AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 09:46

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								CB	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331351	SR-90	1.70E-01	pCi/L	1.9E-01	U	3.76E-01	71.5		SRISO_SEP_P	1.0002E+00	12/31/2006				D
BLK	10098-97-2			1.8E-01						L	08:18				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDGG1AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									CD	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331352 BLK	I-129L 15046-84-1	-3.49E-02	pCi/L	1.5E-01 1.5E-01	U	2.67E-01	93.0		I129LL_SEP_L	3.6871E+00 L	01/03/2007 17:01				D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

11

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JL43T1AB

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
									CF	H					
	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6360197	I-129L	-2.81E-01	pCi/L	2.0E-01	U	2.92E-01	90.0		I129LL_SEP_L	3.4032E+00	01/03/2007				D
BLK	15046-84-1			2.0E-01						L	22:46				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JMDMG1AB

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7003498	BETA	2.51E+00	pCi/L	1.3E+00		2.46E+00	100.0		9310_ALPHAB	2.039E-01	01/09/2007				D
BLK	12587-47-2			1.3E+00						L	12:33				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JKDE31CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/20/2006 11:03

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/20/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331331	H-3	2.38E+03	pCi/L	2.4E+02		3.05E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	12/16/2006			70	D
BS	10028-17-8			2.0E+02				87.7		L	17:12			130	

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05068.Edd, h:\Reportdb\edd\Fead\IV\Rad\34185.Edd

Lab Sample Id: JKDE31EM

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/20/2006 11:03

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/20/2006

SAF Nbr	Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RType			
	MW6-SBB-A19981										BL	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331331	H-3	2.51E+03	pCi/L	2.5E+02		3.12E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	12/17/2006			70	D
BS	10028-17-8			2.1E+02				92.4		L	08:11			130	

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDE81CS

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 08:19

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BN	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331335	Uranium	3.55E+01	ug/L	4.2E+00		8.22E-02		3.56E+01	UTOT_KPA	2.55E-02	01/03/2007			70	D
BS	7440-61-1			4.2E+00				99.5		ML	10:33			130	

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\W05068.Edd, h:\Reportdb\eddd\Fead\W05068.Edd, h:\Reportdb\eddd\Fead\W05068.Edd

Lab Sample Id: JKDE81DS

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 08:19

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BO		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
6331335	Uranium	3.67E+00	ug/L	3.9E-01		8.32E-02		3.57E+00	UTOT_KPA	2.52E-02	01/03/2007			70	D						
BS	7440-61-1			3.9E-01				102.8		ML	10:35			130							

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

17

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDF01CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RType			
	MW6-SBB-A19981										BQ	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331346	BETA	2.02E+01	pCi/L	3.4E+00		1.81E+00	100.0	2.28E+01	9310_ALPHAB	2.001E-01	12/29/2006			70	D
BS	12587-47-2			1.7E+00				88.4		L	16:26			130	

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDF41CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:31

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BS		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
6331348 BS	CO-60 10198-40-0	3.08E+01	pCi/L	8.4E+00 8.4E+00		4.39E+00		3.78E+01 81.3	GAMMALL_GS	1.9999E+00 L	12/27/2006 07:16			70 130	D						
6331348 BS	CS-137 10045-97-3	2.16E+01	pCi/L	6.1E+00 6.1E+00		4.96E+00		2.52E+01 86.0	GAMMALL_GS	1.9999E+00 L	12/27/2006 07:16			70 130	D						
6331348 BS	EU-152 14683-23-9	6.28E+01	pCi/L	1.7E+01 1.7E+01	U	2.51E+01		7.61E+01 82.6	GAMMALL_GS	1.9999E+00 L	12/27/2006 07:16			70 130	D						

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JKDFH1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									BU	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331338 BS	NI-63 13981-37-8	3.14E+02	pCi/L	2.3E+01 5.0E+00		3.25E+00	105.2	3.83E+02 81.9	NI63_LSC	4.009E-01 L	12/23/2006 07:07			70 130	D

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\IV\Rad\W05068.Edd, h:\Reportdb\eddd\Fead\IV\Rad\34185.Edd

Lab Sample Id: JKDFL1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 13:02

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331339 BS	TC-99 14133-76-7	4.98E+02	pCi/L	3.9E+01 1.3E+01		9.90E+00	100.0	5.49E+02 90.7	TC99_ETVDSK	1.248E-01 L	12/21/2006 21:05			70 130	D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDFR1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 13:00

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									BY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331340 BS	TC-99 14133-76-7	4.98E+02	pCi/L	3.5E+01 1.3E+01		9.76E+00	100.0	5.45E+02 91.5	TC99_SEP_LS	1.265E-01 L	12/23/2006 06:30			70 130	D

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDFV1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									CA	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331345 BS	ALPHA 12587-46-1	1.99E+01	pCi/L	5.1E+00 2.0E+00		5.15E-01	100.0	2.29E+01 87.1	9310_ALPHAB	2.008E-01 L	12/29/2006 17:23			70 130	D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JKDGC1CS

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 09:46

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331351	SR-90	1.37E+01	pCi/L	2.1E+00		4.26E-01	77.6	1.35E+01	SRISO_SEP_P	1.0009E+00	12/31/2006			70	D
BS	10098-97-2			7.2E-01				101.3		L	10:13			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JKDGG1CS

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*: .

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									CE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331352 BS	I-129L 15046-84-1	8.57E+00	pCi/L	1.1E+00 1.1E+00		2.55E-01	90.9	1.02E+01 84.2	I129LL_SEP_L	3.7925E+00 L	01/03/2007 17:01			70 130	D

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JL43T1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									CG	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6360197	I-129L	8.90E+00	pCi/L	1.3E+00		4.11E-01	87.9	1.07E+01	I129LL_SEP_L	3.5892E+00	01/03/2007			70	D
BS	15046-84-1			1.3E+00				83.3		L	22:47			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JMDMG1CS

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 07:00

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
									CI	H					
	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7003498	BETA	1.69E+01	pCi/L	3.0E+00		2.46E+00	100.0	2.30E+01	9310_ALPHAB	1.997E-01	01/09/2007			70	D
BS	12587-47-2			2.1E+00				73.7		L	12:33			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2N91GR

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 09:46

Client Id: B1L6Y4

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
W07-011		MW6-SBB-A19981																AV		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
6331351	SR-90	7.18E-02	pCi/L	1.7E-01	U	3.61E-01	79.0		SRISO_SEP_P	1.0045E+00	12/31/2006	46.2	0.4		D						
DUP	10098-97-2	1.15E-01		1.7E-01						L	08:18	20.0	3								

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2NX1FR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:19

Client Id: B1L6W0

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-011	MW6-SBB-A19981								AW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331335 DUP	Uranium 7440-61-1	5.06E+00 5.05E+00	ug/L	5.3E-01 5.3E-01		8.38E-02			UTOT_KPA	2.50E-02 ML	01/03/2007 10:38	.3 20.0	0. 3		D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2TT1ER

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 13:00

Client Id: B1L715

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
W07-011	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331340	TC-99	1.16E+01	pCi/L	6.3E+00		9.72E+00	100.0		TC99_SEP_LS	1.27E-01	12/23/2006	6.1	0.2		D
DUP	14133-76-7	1.23E+01		4.4E+00							06:30	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

30

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JJ2V11KR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: B1L619

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-011	MW6-SBB-A19981								AZ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331338	NI-63	8.12E+02	pCi/L	5.5E+01		3.21E+00	101.6		NI63_LSC	3.992E-01	12/23/2006	3.0	0.6		D
DUP	13981-37-8	8.36E+02		7.8E+00						L	01:59	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JJ2V11LR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: B1L619

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
W07-011		MW6-SBB-A19981																BA		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
6331345	ALPHA	3.33E-01	pCi/L	1.3E+00	U	3.27E+00	100.0		9310_ALPHAB	7.35E-02	12/29/2006	120.8	1.1		D						
DUP	12587-46-1	1.35E+00		1.3E+00						L	15:29	20.0	3								

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JJ2V11NR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:05

Client Id: B1L619

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-011	MW6-SBB-A19981								BB	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6360197	I-129L	4.06E+01	pCi/L	4.3E+00		5.60E-01	86.8		I129LL_SEP_L	3.9137E+00	01/03/2007	2.9	0.4		D
DUP	15046-84-1	3.95E+01		4.3E+00						L	19:07	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JJ2VD1FR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 13:02

Client Id: B1L799

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
W07-011	MW6-SBB-A19981														
6331339	TC-99	6.44E+01	pCi/L	1.0E+01		9.89E+00	100.0		TC99_ETVDSK	1.249E-01	12/21/2006	4.3	0.4		D
DUP	14133-76-7	6.72E+01		6.0E+00						L	21:05	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JJ2W41HR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:31

Client Id: B1L626

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
W07-011		MW6-SBB-A19981																BE		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
6331348	BE-7	-1.45E+01	pCi/L	2.6E+01	U	4.47E+01			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	0.5		D						
DUP	13966-02-4	-5.89E+00		2.6E+01						L	07:15	20.0	3								
6331348	CO-60	-2.38E-01	pCi/L	2.2E+00	U	4.46E+00			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	0.		D						
DUP	10198-40-0	-2.24E-01		2.2E+00						L	07:15	20.0	3								
6331348	CS-134	-2.19E+00	pCi/L	3.1E+00	U	5.13E+00			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	1.1		D						
DUP	13967-70-9	2.24E-01		3.1E+00						L	07:15	20.0	3								
6331348	CS-137	1.54E+00	pCi/L	2.3E+00	U	4.75E+00			GAMMALL_GS	1.8827E+00	12/27/2006	66.7	0.5		D						
DUP	10045-97-3	7.67E-01		2.3E+00						L	07:15	20.0	3								
6331348	EU-152	-3.73E-01	pCi/L	5.7E+00	U	1.04E+01			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	0.6		D						
DUP	14683-23-9	-2.93E+00		5.7E+00						L	07:15	20.0	3								
6331348	EU-154	3.67E+00	pCi/L	7.1E+00	U	1.52E+01			GAMMALL_GS	1.8827E+00	12/27/2006	878.6	1.2		D						
DUP	15585-10-1	-2.31E+00		7.1E+00						L	07:15	20.0	3								
6331348	EU-155	-3.09E-01	pCi/L	4.6E+00	U	7.98E+00			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	0.9		D						
DUP	14391-16-3	-3.33E+00		4.6E+00						L	07:15	20.0	3								
6331348	K-40	-3.11E+01	pCi/L	5.2E+01	U	1.14E+02			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	0.5		D						
DUP	13966-00-2	-5.14E+01		5.2E+01						L	07:15	20.0	3								
6331348	RU-106	-4.75E+00	pCi/L	2.5E+01	U	4.57E+01			GAMMALL_GS	1.8827E+00	12/27/2006	522.6	0.9		D						
DUP	13967-48-1	1.06E+01		2.5E+01						L	07:15	20.0	3								
6331348	SB-125	-5.09E+00	pCi/L	6.0E+00	U	9.73E+00			GAMMALL_GS	1.8827E+00	12/27/2006	0.0	1.3		D						
DUP	14234-35-6	4.95E-01		6.0E+00						L	07:15	20.0	3								

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05068.Edd, h:\Reportdb\edd\Fead\I\Rad\34185.Edd

Lab Sample Id: JJ2WR1JR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 07:00

Client Id: B1L627

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
W07-011	MW6-SBB-A19981													BF	H
6331352	I-129L	-1.01E-01	pCi/L	1.4E-01	U	2.35E-01	85.9		I129LL_SEP_L	3.8297E+00	01/03/2007	0.0	0.4		D
DUP	15046-84-1	-1.44E-01		1.4E-01						L	15:17	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2WR3HR

Sdg/Rept Nbr: W05068 34185

Collection Date: 11/17/2006 07:00

Client Id: B1L627

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
W07-011	MW6-SBB-A19981													BG	H
7003498	BETA	8.79E-01	pCi/L	1.2E+00	U	2.56E+00	100.0		9310_ALPHAB	1.959E-01	01/09/2007	105.4	0.7		D
DUP	12587-47-2	2.73E-01		1.2E+00							12:33	20.0	3		

Friday, January 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ6201CR

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/20/2006 11:03

Client Id: B1L3X4

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 11/20/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
S07-011	MW6-SBB-A19981								BH	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331331	H-3	2.49E+04	pCi/L	1.1E+03		3.03E+02	100.0		906.0_H3_LSC	5.00E-03	12/17/2006	2.4	0.8		D
DUP	10028-17-8	2.55E+04		5.2E+02						L	17:44	20.0	3		

Friday, January 12, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2N21FW

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 08:58

Client Id: B1L760

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-011	MW6-SBB-A19981								AU	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331335	Uranium	3.49E+01	ug/L	7.1E+00		8.25E-02		3.57E+01	UTOT_KPA	2.54E-02	01/03/2007			60	D
MS	7440-61-1			7.1E+00				97.8		ML	10:44			140	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Friday, January 12, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05068.Edd, h:\Reportdb\edd\FeadIV\Rad\34185.Edd

Lab Sample Id: JJ2PK1EW

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 11:02

Client Id: B1L6X0

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-011	MW6-SBB-A19981								AX	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331340 MS	TC-99 14133-76-7	3.23E+03	pCi/L	2.0E+02 3.1E+01		9.73E+00	100.0	3.57E+03 90.4	TC99_SEP_LS	1.268E-01 L	12/23/2006 06:30			60 140	D

Friday, January 12, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd, h:\Reportdb\edd\Fead\W05068.Edd

Lab Sample Id: JJ2VN1GW

Sdg/Rept Nbr: W05068

34185

Collection Date: 11/17/2006 12:00

Client Id: B1L623

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 11/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W07-011	MW6-SBB-A19981								BD	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6331339	TC-99	3.46E+03	pCi/L	2.4E+02		9.70E+00	100.0	3.56E+03	TC99_ETVDSK	1.276E-01	12/21/2006			60	D
MS	14133-76-7			3.2E+01				97.0		L	21:05			140	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6331345; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05068; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used Analysis Volume => JJ2VN1AC 187.70<200.00 JJ2V11AC 75.10<200.00 JJ2W41AC 146.50<200.00 JJ2XD1AC 125.70<200.00 Q:VB	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JJ2V11AL ALPHA 120.0 (RPD)	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JJ2V11AL ALPHA 3.3E+00>3.0E+00 Q:C1	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JJ2XD1AC ALPHA 2.6E+00 L:1.8E+00	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	Yes	No	N/A
8.24	Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A

NCM 10-09194

8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
8.26 Instruments have Current Calibrations.	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

First Level Review

Pam Anderson

Date 1-2-07

STL Richland

QAS_RADCALCv4.8.26

Page 2

STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331345

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?		✓	
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review:

Sheryl A. Adam

Date: 1-3-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: 10-09196	Classification: Anomaly
NCM Initiated By: Pam Anderson	Status: GLREVIEW
Date Opened: 01/02/2007	Production Area: Environmental - Sep
Date Closed:	Tests: Alpha by GPC-Am
	Lot #'s (Sample #'s): J6K180164 (3),
	QC Batches: 6331345
Nonconformance: MDA not met	
Subcategory: Data accepted	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	01/02/2007	Due to a slightly higher count rate in the background of the alpha detector the MDA was not quite met on the duplicate, but it was on the sample itself. The MDA achieved was 3.27 pCi/l. The sample result was >MDA. Data will be accepted.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	01/02/2007	Note in case narrative.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
----------------------	--------------------	-----------------

Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7003498; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05068; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JJ2WR3AH BETA 110.0 (RPD)	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	Yes	No	N/A
8.24	Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25	Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

NCM 10-09241

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used.	Yes	No	N/A
No Count Library found in Batch Data!			
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions.)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions.)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	Yes	No	N/A
OK			

First Level Review Pam Anderson Date 1-10-27



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7003498
W05068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review

Sheryl A. Adams

Date: 1-10-07

Clouseau Nonconformance Memo



NCM #: 10-09241	Classification: Anomaly
NCM Initiated By: Pam Anderson	Status: GLREVIEW
Date Opened: 01/10/2007	Production Area: Environmental - Sep
Date Closed:	Tests: Beta by GPC-Sr/Y
	Lot #'s (Sample #'s): J6K180164 (5),
	QC Batches: 6331346
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	01/10/2007	The duplicates were out on this batch of beta in water. A recount did not help. The sample and duplicate were reanalyzed with good results.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	01/10/2007	The sample and duplicate were reanalyzed.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6331346; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05068; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	Analysis Volume => JJ2V11AD 77.30<200.00			✓
	JJ2W41AD 159.70<200.00			
	JJ2XD1AD 140.40<200.00 Q:VB			
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	OK	✓		
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
	See NCM batch 7003498			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	No Matrix Blanks (MBIs) found in Batch!			✓
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	RPD > UCL : 20.0=> JJ2WR1AH BETA 180.0			✓
	JJ2WR2AH BETA 150.0 (RPD)			
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	No Matrix Spikes (MLCS) found in Batch!			✓
8.16	MS within Control Limits.	Yes	No	N/A
	No Matrix Spike Samples (MS) found in Batch!			✓
8.17	Tracer within Control Limits.	Yes	No	N/A
	OK	✓		
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	OK	✓		
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	MDC/MDA > CRDL => JJ2V11AD BETA 4.8E+00>4.0E+00 Q:C1			✓
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Limit Specified!			✓
8.22	Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
	Batch Positive Result =>			✓
	JJ2VD1AD BETA 1.7E+01 L:3.1E+00			
	JJ2VN1AD BETA 2.7E+01 L:2.7E+00			
	JJ2V11AD BETA 1.6E+03 L:4.8E+00			
	JJ2WR1AD BETA 7.6E+00 L:2.6E+00			
	JJ2W41AD BETA 1.9E+02 L:3.5E+00			
	JJ2XD1AD BETA 6.1E+02 L:3.9E+00			
	JJ2WR2AD BETA 6.7E+00 L:2.4E+00			

8.23	Result \leq Action Level, when Defined. OK; No Action Level Found \Rightarrow BETA	Yes <input checked="" type="checkbox"/>	No	N/A
	OK; No Callin Level Found \Rightarrow BETA			
8.24	Result + 3s ≥ 0 , Not Too Negative. OK	Yes <input checked="" type="checkbox"/>	No	N/A
8.25	Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A <input checked="" type="checkbox"/>
8.26	Instruments have Current Calibrations.	Yes	No	N/A
8.27	Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A <input checked="" type="checkbox"/>
8.28	Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29	Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3	Comments:			
8.31	Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/>	No	N/A

First Level Review

Pam Anderson

Date

1-10-07

STL Richland

QAS_RADCALCv4.8.26

STL RICHLAND

Page 2

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6351346
W05068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: 1-10-07



STL

Data Review/Verification Checklist

1/2/2007 1:55:54 PM

RADIOCHEMISTRY, First Level Review

Lot No., Due Date: J6K180149, J6K180164; 01/04/2007
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 6331351; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05068; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Date

1-2-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331351
W05068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date:

1-3-07

Lot No., Due Date: J6K180149, J6K180164; 01/04/2007
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 6331348; RGAMMA Gamma by GER
SDG, Matrix: W05068; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

✓

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

✓

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

✓

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

✓

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

✓

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

✓

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

✓

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

✓

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

✓

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

✓

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

✓

4.2 Were analysis volumes entered correctly?

Yes No N/A

✓

4.3 Were Yields entered correctly?

Yes No N/A

✓

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

✓

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

✓

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

✓

5.2 Are all required forms filled out?

Yes No N/A

✓

5.3 Was the correct methodology used?

Yes No N/A

✓

5.4 Was transcription checked?

Yes No N/A

✓

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

✓

5.6 Are worksheet entries complete and correct?

Yes No N/A

✓

6.0 Comments on any No response:

First Level Review

Pam Anderson

Date 12-27-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

631348
W05068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sherry A. Adams

Date:

12-28-06

Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868; *W05068*
QC Batch No., Method Test: 6331352; RGAMLEPS Gamma by LEPS
SDG, Matrix: ,; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? ☒ Yes ☐ No ☐ N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? ☒ Yes ☐ No ☐ N/A

2.2 Are the QC appropriate for the analysis included in the batch? ☒ Yes ☐ No ☐ N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? ☒ Yes ☐ No ☐ N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? ☒ Yes ☐ No ☐ N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.2 Is the LCS result, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? ☒ Yes ☐ No ☒ N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

3.5 Are the sample yields and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? ☒ Yes ☐ No ☐ N/A

4.2 Were analysis volumes entered correctly? ☒ Yes ☐ No ☐ N/A

4.3 Were Yields entered correctly? ☒ Yes ☐ No ☒ N/A

4.4 Were spectra reviewed/meet contractual requirements? ☒ Yes ☐ No ☐ N/A

4.5 Were raw counts reviewed for anomalies? ☒ Yes ☐ No ☐ N/A

5.0 Other

5.1 Are all nonconformances included and noted? ☒ Yes ☐ No ☐ N/A

5.2 Are all required forms filled out? ☒ Yes ☐ No ☐ N/A

5.3 Was the correct methodology used? ☒ Yes ☐ No ☐ N/A

5.4 Was transcription checked? ☒ Yes ☐ No ☐ N/A

5.5 Were all calculations checked at a minimum frequency? ☒ Yes ☐ No ☐ N/A

5.6 Are worksheet entries complete and correct? ☒ Yes ☐ No ☐ N/A

6.0 Comments on any No response:

First Level Review *Pam Anderson*Date *1-9-07*



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331352

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: 1-9-07



STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/8/2007 4:22:17 PM

Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868;
QC Batch No., Method Test: 6360197; RGAMLEPS Gamma by LEPS
SDG, Matrix: ; WATER *W05068*

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

☒

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

☒

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

☒

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

☒

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

☒

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

☒

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

☒

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

☒

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

☒

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

☒

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

☒

4.2 Were analysis volumes entered correctly?

Yes No N/A

☒

4.3 Were Yields entered correctly?

Yes No N/A

☒

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

☒

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

☒

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

☒

5.2 Are all required forms filled out?

Yes No N/A

☒

5.3 Was the correct methodology used?

Yes No N/A

☒

5.4 Was transcription checked?

Yes No N/A

☒

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

☒

5.6 Are worksheet entries complete and correct?

Yes No N/A

☒

6.0 Comments on any No response:

First Level Review

Pam Anderson

Date

1-9-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6360197

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sherryl A. Adams

Date: 1-9-07

Lot No., Due Date: J6K180149; 01/04/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6331340; RTC99 Tc-99 by LSC
SDG, Matrix: W05068; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JJ2PK1AE TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.

Yes No N/A

8.27 Correct Count Library Used.

Yes No N/A

No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version) ☒ Yes ☐ No ☐ N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version) ☒ Yes ☐ No ☐ N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate.
OK

Yes No N/A



First Level Review

Pam Anderson

Date

12-26-06

STL Richland

QAS_RADCALCv4.8.26

Page 2

STL RICHLAND



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

4231340
W000068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl A. Adams

Date:

11-17-06

**STL**

Data Review/Verification Checklist

12/22/2006 2:16:06 PM

RADIOCHEMISTRY, First Level Review

Lot No., Due Date: J6K180149, J6K180164; 01/04/2007
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 6331339; RTC99 Tc-99 by LSC
SDG, Matrix: W05068; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review _____

Date _____

STL Richland

QAS_RADCALCv4.8.26

Page 1

STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331337

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?			
3. Are the correct isotopes reported?			
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			
5. Is the LCS recovery with contract acceptance criteria?	✓		✓
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl A. Adams

Date: 12-27-06

Lot No., Due Date: J6K180149,J6K180164,J6K210263; 01/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6331331; RTRITIUM H-3 by LSC

SDG, Matrix: W05068; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.02 Final Results Are in the Appropriate Activity Units OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.03 Batch Contains the Required QC Appropriate for the Method OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JJ2NX1AA 5.00<10.00 JJ2N21AA 5.00<10.00 JJ2N91AA 5.00<10.00 JJ2PK1AA 5.00<10.00 JJ2TP1AA 5.00<10.00 JJ2TT1AA 5.00<10.00 JJ2VD1AA 5.00<10.00 JJ2VN1AA 5.00<10.00 JJ2V11AA 5.00<10.00 JJ2WH1AA 5.00<10.00 JJ2WR1AA 5.00<10.00 JJ2W41AA 5.00<10.00 JJ2XD1AA 5.00<10.00 JJ6201AA 5.00<10.00 JJ6231AA 5.00<10.00 JJ6261AA 5.00<10.00 Q:VB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.07 The Correct Count Geometry was Used. Count Geometry => JKDE31AF SVP15/5<=>SVP10/10 JKDE31AG SVP15/5<=>SVP10/10 JKDE31AA SVP15/5<=>SVP10/10 JKDE31AC SVP15/5<=>SVP10/10 JJ2NX1AA SVP15/5<=>SVP10/10 JJ2N21AA SVP15/5<=>SVP10/10 JJ2N91AA SVP15/5<=>SVP10/10 JJ2PK1AA SVP15/5<=>SVP10/10 JJ2TP1AA SVP15/5<=>SVP10/10 JJ2TT1AA SVP15/5<=>SVP10/10 JJ2VD1AA SVP15/5<=>SVP10/10 JJ2VN1AA SVP15/5<=>SVP10/10 JKDE31AH SVP15/5<=>SVP10/10 JKDE31AD SVP15/5<=>SVP10/10 JKDE31AE SVP15/5<=>SVP10/10 JJ2V11AA SVP15/5<=>SVP10/10 JJ2WH1AA SVP15/5<=>SVP10/10 JJ2WR1AA SVP15/5<=>SVP10/10 JJ2W41AA SVP15/5<=>SVP10/10 JJ2XD1AA SVP15/5<=>SVP10/10 JJ6201AA SVP15/5<=>SVP10/10 JJ6201AC SVP15/5<=>SVP10/10 JJ6231AA SVP15/5<=>SVP10/10 JJ6261AA SVP15/5<=>SVP10/10 Q:VC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.09 Method Blank is within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. OK	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK: No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes	No	N/A

First Level Review

Pam Anderson

Date

12-26-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331331
W05048

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sherryll A. Adams

Date: 12-27-06

Lot No., Due Date: J6K180164; 01/04/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6331338; RNI63 Ni-63 by LSC
SDG, Matrix: W05068; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	OK	✓		
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	OK	✓		
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	No Matrix Blanks (MBIs) found in Batch!			✓
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	OK (RPD)	✓		
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	No Matrix Spikes (MLCS) found in Batch!			✓
8.16	MS within Control Limits.	Yes	No	N/A
	No Matrix Spike Samples (MS) found in Batch!			✓
8.17	Tracer within Control Limits.	Yes	No	N/A
	No Tracers found in Batch!			✓
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	No Tracers found in Batch!			✓
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	OK	✓		
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Limit Specified!			✓
8.22	Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Positive Results	✓		
	OK Calc_IDL Not Calculated			
8.23	Result <= Action Level, when Defined.	Yes	No	N/A
	OK; No Action Level Found => NI-63	✓		
	OK; No Callin Level Found => NI-63			
8.24	Result + 3s >=0, Not Too Negative.	Yes	No	N/A
	OK	✓		
8.25	Counting Spectrum are within FWHM Limits.	Yes	No	N/A
	No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes No N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes No N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input checked="" type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input checked="" type="checkbox"/>
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes No N/A <input checked="" type="checkbox"/>

First Level Review

Pam Anderson

Date

12-27-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331338
W05068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: 12-28-06



STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

1/8/2007 4:21:07 PM

Lot No., Due Date: J6K180149, J6K210219; 01/04/2007

Client, Site: 384868;

QC Batch No., Method Test: 6331335; RUNAT UNat by KPA

SDG, Matrix: ,,,,W05068; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

✓

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

✓

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

✓

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

✓

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

✓

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

✓

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

✓

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

✓

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

✓

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

✓

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

✓

4.2 Were analysis volumes entered correctly?

Yes No N/A

✓

4.3 Were Yields entered correctly?

Yes No N/A

✓

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

✓

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

✓

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

✓

5.2 Are all required forms filled out?

Yes No N/A

✓

5.3 Was the correct methodology used?

Yes No N/A

✓

5.4 Was transcription checked?

Yes No N/A

✓

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

✓

5.6 Are worksheet entries complete and correct?

Yes No N/A

✓

6.0 Comments on any No response:

See NCM.

10-09218 10-69236

First Level Review

Pam Anderson

Date

1-9-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

6331335
605068

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review:

Sheryl A. Adams

Date:

1-9-07

Clouseau Nonconformance Memo



NCM #: **10-09218**
 NCM Initiated By: Pam Anderson
 Date Opened: 01/05/2007
 Date Closed:

Classification: **Anomaly**
 Status: **CHREVIEW**
 Production Area: Counting
 Tests: UNat by KPA
 Lot #'s (Sample #'s): J6K180119 (1), J6K180199
 (1,2,3), J6K270000 (224),
 J6L110171 (1), J6L120154
 (2), J6L120229 (1,2),
 J6L120243 (1,2,3),
 J6L120248 (1,2,3,4,5),
 J6L120325
 (1,10,11,12,2,3,4,5,6,7,8,9),
 J6L130000 (316,378,449),
 QC Batches: 6331224, 6347316, 6347378,
 6347449

Nonconformance: Other (describe in detail)
 Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	01/05/2007	The blank needed recounting in all these total uranium batches. The blanks read very low, at 0 ug/L. All the parameters were not met. The blanks were recounted and a matrix spike added to the sample on a second count to meet the parameters. Data accepted.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	01/05/2007	The tech was given further training on the KPA counting.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Clouseau Nonconformance Memo

**SEVERN
TRENT
SERVICES**

NCM #: 10-09236	Classification: Anomaly
NCM Initiated By: Pam Anderson	Status: GLREVIEW
Date Opened: 01/09/2007	Production Area: Environmental - Sep
Date Closed:	Tests: UNat by KPA
	Lot #'s (Sample #'s): J6K180149 (4,5),
	QC Batches: 6331335
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	01/09/2007	Two uranium samples being counted on the KPA had results greater than the calibration limit. They had to be recounted with a smaller aliquot. Recount acceptable.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	01/09/2007	The tech was given further training on requirements for KPA acceptance.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

PNNL <i>16K180149</i> <i>W05768</i> <i>due 01-01-07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-011-126
Collector DURRICK F. M. HALL		Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. W07-011		Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA, NOVEMBER 2006		UNF-N-506-1	Ice Chest No. <i>046</i>	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days	Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By DATEX F. M. MALL	Print <i>[Signature]</i>	Sign	Date/Time NOV 17 2006	Received By S. Smith S. Smith	Print	Sign	Date/Time NOV 17 2006	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

PNNL <i>UGK180149</i> <i>W05068</i> <i>due 01-01-07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-011-220
Collector DUPATEK E. M. HALL		Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. W07-011		Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA, NOVEMBER 2006		HNF - N - 506 - 1	Ice Chest No. 040	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days	Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
Relinquished By	<i>[Signature]</i>	<i>[Signature]</i>	NOV 17 2006	Received By	<i>[Signature]</i>	<i>[Signature]</i>	NOV 17 2006	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time

C.O.C. # **W07-011-110**

Page 1 of 1

Collector DURATEX F. M. PAUL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, NOVEMBER 2006	HNF-506-1	Ice Chest No. 040	Temp.	
Shipped To (Lab) Savern Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	
1	
2	
3	
4	
5	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.</p> <p>WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.</p>		

[illegible]

Relinquished By	Date/Time	Received By	Date/Time	Matrix * S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WL = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By	Date/Time

PNNL 16K180149
W05068
Due 01-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-011-134**

Page 1 of 1

Collector DURATEK F. M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, NOVEMBER 2006	4NF-N-506-1	Ice Chest No.	046	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		
		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By	Print DURATEK F. M. WALL	Signature <i>[Signature]</i>	Date/Time NOV 17 2006	Received By	Print <i>J. Smith</i> J. Smith	Signature <i>[Signature]</i>	Date/Time NOV 17 2006	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other				
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time		

PNNL <i>W05068</i> <i>Due 01-01-07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-011-190	
Collector <i>DURATEX</i> <i>E. M. Hall</i>		Contact/Requester Dot Stewart		Telephone No. <i>509-376-5056</i> MSIN FAX	
SAF No. <i>W07-011</i>		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title <i>RCRA NOVEMBER 2006</i>		<i>HNF-N-506-1</i>		Ice Chest No. <i>040</i> Temp.	
Shipped To (Lab) <i>Severn Trent Incorporated, Richland</i>		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol <i>RCRA</i>		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.	
				Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By DUMATEX F. M. HALL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time NOV 17 2006	1440	Received By <i>S. Smith</i>	Print <i>S. Smith</i>	Sign <i>[Signature]</i>	Date/Time NOV 17 2006	1448	Matrix *	
Relinquished By	Date/Time				Received By	Date/Time				S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine LI = Liquid V = Vegetation X = Other
Relinquished By	Date/Time				Received By	Date/Time					
Relinquished By	Date/Time				Received By	Date/Time					
Relinquished By	Date/Time				Received By	Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)					Disposed By		Date/Time		



STL

Sample Check-in List

Date/Time Received: 11-17-06 14:40

Client: P6W SDG #: W05068 NA ☐ SAF #: W07-011 NA ☐

Work Order Number: JK180149 Chain of Custody # W07-011-126, 94, 220, 110, 134, 190

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 6
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
_____ tape _____ hazard labels
_____ custody seals _____ appropriate samples labels
9. Samples are:
_____ in good condition _____ leaking
_____ broken _____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? * Yes ☒ No ☐
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: D. Smith Date: 11-17-06 14:40

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 16K180164
W05068
Due 01-01-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W07-011-278

Page 1 of 1

Collector Fluor Hanford J. G. HOGAN	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, NOVEMBER 2006	HVFN-506-3	Ice Chest No.	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

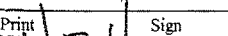
Hold Time

Total Activity Exemption: Yes ☒ No

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
Fluor Hanford J. G. HOGAN			NOV 17 2006	J. Smith	S. Smith		NOV 17 2006	S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

PNNL 06K180164
WD5768
due 01-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #	
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W07-011-390

Page 1 of 1

Collector Fluor Hanford J. G. HOGAN	Contact/Requester Dot Stewart	Telephone No. 509-376-5056		MSIN	FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title RCRA NOVEMBER 2006	<i>HNF-N-506-3</i>	Ice Chest No. <i>CRP-06-002</i> Temp.			
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol RCRA	Priority: 45 Days		Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.			
		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

[illegible]

Relinquished By	Print Fluor Hanford J.G. HOGAN	Sign <i>J.G. Hogan</i>	Date/Time 1445 NOV 17 2006	Received By	Print S. Smith S. SMITH	Sign <i>S. Smith</i>	Date/Time 1445 NOV 17 2006	Matrix *	
Relinquished By			Date/Time	Received By			Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WT = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time		

PNNL

JK186164
W05068
Due 01-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W07-011-408

Page 1 of 1

Collector	Fluor Hanford J. G. HOGAN	Contact/Requester	Dot Stewart	Telephone No.	MSIN	FAX
SAF No.	W07-011	Sampling Origin	Hanford Site	509-376-5056		
Project Title	RCRA, NOVEMBER 2006			Purchase Order/Charge Code		
Shipped To (Lab)	Severn Trent Incorporated, Richland	Method of Shipment	Govt. Vehicle	Ice Chest No.	GRP-06-002 Temp.	
Protocol	RCRA			Bill of Lading/Air Bill No.		
			Priority: 45 Days	Offsite Property No.		

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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

[illegible]

Relinquished By	Print Fluor Hanford J. G. HOGAN	Sign <i>[Signature]</i>	Date/Time NOV 17 2005	Received By	Print S. Smith	Sign <i>[Signature]</i>	Date/Time NOV 17 2005	Matrix * S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WL = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

PNNL JK180164
W05068
Aug 01-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W07-011-403

Page 1 of 1

Collector	Fluor Hanford J. G. HOGAN	Contact/Requester	Dot Stewart	Telephone No.	MSIN	FAX
SAF No.	W07-011	Sampling Origin	Hanford Site	Purchase Order/Charge Code		
Project Title	RCRA NOVEMBER 2006	HNF-N-506 3		Ice Chest No.	Saws 109	Temp.
Shipped To (Lab)	Severn Trent Incorporated, Richland	Method of Shipment	Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol	RCRA	Priority: 45 Days		Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

[illegible]

Relinquished By Floor Hanford J. G. HOGAN	Print <i>J. G. Hogan</i>	Sign	Date/Time 1445 NOV 17 2006	Received By <i>S. Smith</i>	Print <i>S. Smith</i>	Sign	Date/Time 1445 NOV 17 2006	Matrix *		
Relinquished By			Date/Time	Received By			Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other	
Relinquished By			Date/Time	Received By			Date/Time			
Relinquished By			Date/Time	Received By			Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)							Disposed By	Date/Time

[illegible]

PNNL 16K180164
W05068
due 01-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W07-011-384

Page 1 of 1

Collector: Fluor Hanford J.G. HOGAN		Contact/Requester Dot Stewart	Telephone No. MSIN FAX 509-376-5056	Page 1 of 1
SAF No. W07-011		Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA, NOVEMBER 2006		HVF - N-506-3	Ice Chest No. CR206-002 Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

[illegible]

Relinquished By		Date/Time	Received By	Date/Time	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge W = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By		Date/Time	Received By	Date/Time		
Relinquished By		Date/Time	Received By	Date/Time		
Relinquished By		Date/Time	Received By	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 11-17-06 1445

Client: POW SDG #: W05068 NA ☐ SAF #: W07-011 NA ☐

Work Order Number: JK180164 Chain of Custody # W07-011-278, 396, 390, 408, 403, 402, 384,

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 7
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
_____ tape _____ hazard labels
_____ custody seals _____ appropriate samples labels
9. Samples are:
_____ in good condition _____ leaking
_____ broken _____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH<2 ☒ pH>2 ☒ pH>9 ☐
11. Sample Location, Sample Collector Listed? * Yes ☒ No ☐
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 11-17-06 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 06K210219
W05068
Due 01-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

I07-011-108

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE		Contact/Requester Dot Stewart	Telephone No. MSIN FAX 509-376-5056	Page <u>1</u> of <u>1</u>
SAF No. J07-011		Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title ISRM-LOI, NOVEMBER 2006		HNF-N-506-2	Ice Chest No. ROSS	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol CERCLA		Priority: 45 Days	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
 WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure

[illegible]

Relinquished By Fluor Hanford R. T. SICKLE	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time NOV 20 2006	Received By <i>[Signature]</i>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time NOV 20 2006	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air		DS = Drum Solid DL = Drum Liquid T = Tissue WT = Wine L = Liquid V = Vegetation X = Other			
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time			

PNNL <i>J6 K210219</i> <i>W05068</i> <i>Due 01-04-07</i>	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 107-011-74
Cell #	Page 1 of 1	

Collector	Fluor Hanford	Contact/Requester	Telephone No.	MSIN	FAX
SAF No.	R. T. SICKLE	Dot Stewart	509-376-5056		
Project Title		Sampling Origin	Purchase Order/Charge Code		
ISRM-LOI NOVEMBER 2006		Hanford Site			
Shipped To (Lab)		HNF-N-506-2	Ice Chest No.	ROSS	Temp.
Severn Trent Incorporated, Richland		Method of Shipment	Bill of Lading/Air Bill No.		
Protocol		Govt. Vehicle			
CERCLA		Priority: 45 Days	Offsite Property No.		

<p>POSSIBLE SAMPLE HAZARDS/REMARKS</p> <p>** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)</p>	<p>SPECIAL INSTRUCTIONS</p> <p>Hold Time</p> <p>Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.</p> <p>WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure</p>
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[illegible]

Relinquished By Fluor Hanford R. T. SICKLE	Print <i>[Signature]</i>	Signature <i>[Signature]</i>	Date/Time NOV 20 2006	Received By <i>[Signature]</i>	Print S. Smith	Signature <i>[Signature]</i>	Date/Time NOV 20 2006	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time	S = Soil		DS = Drum Solid		SE = Sediment	
Relinquished By	Date/Time	Received By	Date/Time	SO = Solid		DI = Drum Liquid		T = Tissue	
Relinquished By	Date/Time	Received By	Date/Time	SL = Sludge		WI = Wine		L = Liquid	
Relinquished By	Date/Time	Received By	Date/Time	W = Water		V = Vegetation		X = Other	
Relinquished By	Date/Time	Received By	Date/Time	O = Oil					
Relinquished By	Date/Time	Received By	Date/Time	A = Air					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	

PNNL 16K210219
W05068
due 01-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #	
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I07-011-82

Page 1 of 1

Collector	Fluor Hanford R. T. SICKLE	Contact/Requester Dot Stewart	Telephone No.	MSIN	FAX
SAF No.	107-011	Sampling Origin Hanford Site	509-376-5056		
Project Title	ISRM-LOI NOVEMBER 2006		Purchase Order/Charge Code		
Shipped To (Lab)	Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Ice Chest No.	ROSS	Temp.
Protocol	CERCLA	Priority: 45 Days	Bill of Lading/Air Bill No.		
			Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
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All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure

[illegible]

Relinquished By	Print R. T. SICKLE	Sign <i>[Signature]</i>	Date/Time NOV 20 2006	Received By	Print D. Smith	Sign <i>[Signature]</i>	Date/Time NOV 20 2006	Matrix * S = Soil DS = Drum Solid SE = Sediment DI. = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L. = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 11-20-06 1500

Client: PGW SDG #: W05068 NA ☐ SAF #: W07-011 NA ☐

Work Order Number: UGK210219 Chain of Custody # W07-011-24, 108, 74, 82

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☐ Wet ☐ Dry ☐
6. Number of samples in shipping container: 43
7. Sample holding times exceeded? Pw. 11/21/07 NA ☒ Yes ☐ No ☐
8. Samples have:
_____ tape _____ hazard labels
_____ custody seals _____ appropriate samples labels
9. Samples are:
_____ in good condition _____ leaking
_____ broken _____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 7 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? * Yes ☒ No ☐
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith

Date: 11-20-06 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 16K210263,
W05068
Due 01-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

S07-011-58

Page 1 of 1

Collector	Fluor Hanford F. M. HALL	Contact/Requester	Dot Stewart	Telephone No.	MSIN	FAX
SAF No.	S07-011	Sampling Origin	Hanford Site	509-376-5056		
Project Title	SURV. NOVEMBER 2006	HNF.N-506 4		Purchase Order/Charge Code		
Shipped To (Lab)	Severn Trent Incorporated, Richland	Method of Shipment	Govt. Vehicle	Ice Chest No.	Temp.	
Protocol	SURV	Priority: 45 Days		Bill of Lading/Air Bill No.		
				Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	
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** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS

Hold Time

Total Activity Exemption: Yes ☒ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

[illegible]

Relinquished By F. M. HALL	Print Signature	Date/Time NOV 20 2006 15:46	Received By David Handberg	Print Signature	Date/Time NOV 20 2006 15:46	Matrix * S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WL = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By		Date/Time	Received By		Date/Time		
Relinquished By		Date/Time	Received By		Date/Time		
Relinquished By		Date/Time	Received By		Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)					Disposed By	Date/Time

STP PCHAND

PNNL 06K210263 W05068 due 01-04-07							CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. # S07-011-70						
Collector DURATEK F. M. HALL							Contact/Requester Dot Stewart				Telephone No. 509-376-5056		MSIN FAX				
SAF No. S07-011							Sampling Origin Hanford Site				Purchase Order/Charge Code						
Project Title SURV. NOVEMBER 2006							HNF-N-506 4				Ice Chest No. S4WS-115		Temp.				
Shipped To (Lab) Severn Trent Incorporated, Richland							Method of Shipment Govt. Vehicle				Bill of Lading/Air Bill No.						
Protocol SURV							Priority: 45 Days				Offsite Property No.						
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)							SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.							Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis							Preservative				
B1L3X1		W	11-20-06	1015	1x1000-mL P	906.0_H3_LSC: Tritium (1)							None				
B1L3X1		W	1	1	1x20-mL P	Activity Scan							None				
<div>11-20-06</div> <div>JS624</div> <div>DA</div>																	
Relinquished By DURATEK F. M. HALL							Print NOV 20 2006		Sign DAVID HARBINS		Date/Time NOV 20 2006		Matrix *				
Relinquished By							Date/Time		Received By		Date/Time		S = Soil SE = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air				
Relinquished By							Date/Time		Received By		Date/Time		DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine LI = Liquid V = Vegetation X = Other				
Relinquished By							Date/Time		Received By		Date/Time						
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)							Disposed By		Date/Time						



STL

Sample Check-in List

Date/Time Received: 11-20-06 1500

Client: P6W SDG #: W05068 NA ☐ SAF #: 507-011 NA ☐

Work Order Number: UGK210263 Chain of Custody # 507-011-70, 64, 58

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
_____ tape _____ hazard labels
_____ custody seals _____ appropriate samples labels
9. Samples are:
_____ in good condition _____ leaking
_____ broken _____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? * Yes ☒ No ☐
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: DH Date: 11-20-06 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

Seger, Sandra

From: Stewart, Dorothy L [dot.stewart@pnl.gov]
Sent: Thursday, December 21, 2006 4:21 PM
To: Adam, Sherryl; Seger, Sandra
Cc: Felmy, Diana; Hampt, Heidi; Waters-Husted, Karen S
Subject: FW: W05068 - IRF For Samples B1L619 & B1L615
Attachments: IRFW05068.DOC

Accept proposal. Heidi will follow up with the completed IRF when she returns after the holidays. Diana-please note we will have to make this adjustment in our tracking system for samples that were previously order with the TEVA. Karen- please schedule using the non TEVA disk method for future iodine LL samples to STL Richland. If possible, please make this adjustment to the January paperwork.

Thanks,
Dot

From: Seger, Sandra [mailto:SSeger@stl-inc.com]
Sent: Thursday, December 21, 2006 7:01 AM
To: Stewart, Dorothy L
Cc: Felmy, Diana; Hampt, Heidi; Adam, Sherryl
Subject: W05068 - IRF For Samples B1L619 & B1L615

Dot,

Please refer to the attached IRF.

Thanks,
Sandra

<<IRFW05068.DOC>>

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

**STL RICHLAND ISSUE RESOLUTION FORM
FOR CONTRACT 615 WITH BHI/FH/PNNL**

PNNL Tracking Number: 07-1
SAF No.: W07-011
Date: December 21, 2006
SDG: W05068
Sample No.(s) B1L619, B1L615

Submitted By: Sherryl Adam

Submitted To: Dot Stewart (PNNL)

Phone No. 509-375-3131 x164
Fax No. 509-375-5590

Phone No. 509-376-5056
Fax No. 509-372-1704

ISSUE

Method I129LL_ETVDSK_SEP_GS: I-129_ETVDSK (1)
was requested.

PROPOSED RESOLUTION

Analyzed the samples mentioned above by method
I129LL_SEP_LEPS_GS_LL: I-129(1).

Thanks

BHI/FH/PNNL COMMENTS -

Accept proposed resolution.

Heidi Hampt for Dot Stewart 1/2/07

Signature and date

Seger, Sandra

From: Hampt, Heidi [heidi.hampt@pnl.gov]
Sent: Tuesday, January 02, 2007 2:27 PM
To: Seger, Sandra; Stewart, Dorothy L
Cc: Felmy, Diana; Adam, Sherryl
Subject: RE: W05068 - IRF For Samples B1L619 & B1L615
Attachments: 07-1.DOC

From: Seger, Sandra [mailto:SSeger@stl-inc.com]
Sent: Thursday, December 21, 2006 7:01 AM
To: Stewart, Dorothy L
Cc: Felmy, Diana; Hampt, Heidi; Adam, Sherryl
Subject: W05068 - IRF For Samples B1L619 & B1L615

Dot,

Please refer to the attached IRF.

Thanks,
Sandra

<<IRFW05068.DOC>>

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

12/19/2006 1:10:21 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014

S7 Gross Alpha by GPC using Am-241 curve

51 CLIENT: HANFORD

Pipet #: 235








AnalyDueDate: 01/01/2007 *W05068*Batch: 6331345 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ *APA*

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2VD-1-AC J6K180164-1-SAMP  11/17/2006 13:02	201.40g,in									
2 JJ2VN-1-AC J6K180164-2-SAMP  11/17/2006 12:00	187.70g,in									
3 JJ2V1-1-AC J6K180164-3-SAMP  11/17/2006 11:05	75.10g,in									
4 JJ2V1-1-AL-X J6K180164-3-DUP  11/17/2006 11:05	73.50g,in									
5 JJ2WR-1-AC J6K180164-5-SAMP  11/17/2006 07:00	199.50g,in									
6 JJ2W4-1-AC J6K180164-6-SAMP  11/17/2006 08:31	146.50g,in									
7 JJ2XD-1-AC J6K180164-7-SAMP  11/17/2006 10:14	125.70g,in									

STL RICHLAND

12/19/2006 1:10:24 PM

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014

S7 Gross Alpha by GPC using Am-241 curve

SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331345

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JKDFV-1-AA-B J6K270000-345-BLK 11/17/2006 11:05	200.10g,in									
				1.5	0.7	100	10F	16 20	12/29/06 or 0	
				↓						
9 JKDFV-1-AC-C J6K270000-345-LCS 11/17/2006 11:05	200.80g,in		asd4074 11/09/06,pd 02/09/06,r	✓	0.8	100		1812		

Comments: JJ2W4-SAMP Comments

1% collodion added to ea. samp. 12/29/06 APA

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JJ2VD1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JKDFV1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JKDFV1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JJ2VD1AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JKDFV1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JKDFV1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 9

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

20

STL RICHLAND

1/4/2007 1:50:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BC Gross Beta PrpRC5014

Pipet #: 235

AnalyDueDate: 01/01/2007 W05068

S8 Gross Beta by GPC using Sr/Y-90 curve

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7003498 WATER

pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2WR-3-AD J6K180164-5-SAMP 11/17/2006 07:00	201.60g,in									
1.5 0.2 100 26A 1322 1/9/07										
AmtRec: 20ML,500ML,2XLP,3X4LP #Containers: 7				Scr:		Alpha: 2.30E-03 uCi/Sa		Beta: -1.26E-03 uCi/Sa		
2 JJ2WR-3-AH-X J6K180164-5-DUP 11/17/2006 07:00	195.90g,in									
0.5 26B										
AmtRec: 20ML,500ML,2XLP,3X4LP #Containers: 7				Scr:		Alpha: 2.30E-03 uCi/Sa		Beta: -1.26E-03 uCi/Sa		
3 JMDMG-1-AA-B J7A030000-498-BLK 11/17/2006 07:00	203.90g,in									
0.1 26C										
AmtRec: #Containers: 1				Scr:		Alpha:		Beta:		
4 JMDMG-1-AC-C J7A030000-498-LCS 11/17/2006 07:00	199.70g,in		BESB2978 12/21/06,pd 08/08/06,r							
0.2 26D										
AmtRec: #Containers: 1				Scr:		Alpha:		Beta:		

Comments: PA L2.0 4B 1-4-07

10% collodion added to ea. samp 1/9/07 APA

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2WR3AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JMDMG1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JMDMG1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JJ2WR3AD-SAMP Calc Info:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

121

STL RICHLAND

1/2/2007 8:31:44 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 01/01/2007

Sample Preparation/Analysis

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
SI CLIENT: HANFORD

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 6331346 WATER pCi/L PM, Quote: SA, 57671

SEO Batch, Test: None All Tests: 6331331 ARS6, 6331338 AAS4, 6331339 FPS5, 6331345 AZS7, 6331346 BCS8, 6331348 AWTA,
6331349 H3TB, 6331351 CLTL, 6331352 BNTB, 6360197 BNTB,

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2VD-1-AD J6K180164-1-SAMP 11/17/2006 13:02	199.80g,in									
2 JJ2VN-1-AD J6K180164-2-SAMP 11/17/2006 12:00	201.00g,in									
3 JJ2V1-1-AD J6K180164-3-SAMP 11/17/2006 11:05	77.30g,in									
4 JJ2WR-1-AD J6K180164-5-SAMP 11/17/2006 07:00	200.80g,in									
5 JJ2WR-1-AH-X J6K180164-5-DUP 11/17/2006 07:00	200.50g,in									
6 JJ2WR-2-AD J6K180164-5-SAMP 11/17/2006 07:00	200.8g				0.4mg	100min	31A	316	1/2/07	
7 JJ2WR-2-AH-X J6K180164-5-DUP 11/17/2006 07:00	200.5				0.1		3NB			


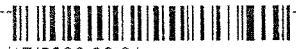


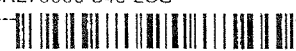
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.26

11/2/2007 8:31:45 AM		Sample Preparation/Analysis				Balance Id:1120482733				
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab		BC Gross Beta PrpRC5014 S8 Gross Beta by GPC using Sr/Y-90 curve SI CLIENT: HANFORD				Pipet #:				
AnalyDueDate: 01/01/2007						Sep1 DT/Tm Tech:				
Batch: 6331346		WATER		pCi/L		PM, Quote: SA , 57671		Sep2 DT/Tm Tech:		
SEQ Batch, Test: None						Prep Tech: BockJ				
										
Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JJ2W4-1-AD 159.70g,in										
J6K180164-6-SAMP										
										
11/17/2006 08:31 AmtRec: 20ML,500ML,2XLP,3X4LP #Containers: 7 Scr: Alpha: 2.27E-03 uCi/Sa Beta: -2.49E-03 uCi/Sa										
9 JJ2XD-1-AD 140.40g,in										
J6K180164-7-SAMP										
										
11/17/2006 10:14 AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 3.37E-03 uCi/Sa Beta: -4.24E-03 uCi/Sa										
10 JKDF0-1-AA-B 201.80g,in										
J6K270000-346-BLK										
										
11/17/2006 07:00 AmtRec: #Containers: 1 Scr: Alpha: Beta:										
11 JKDF0-1-AC-C 200.10g,in besb2969										
J6K270000-346-LCS 11/21/06,pd										
										
11/17/2006 07:00 AmtRec: #Containers: 1 Scr: Alpha: Beta:										
Comments: JJ2W4-SAMP Comments										
All Clients for Batch: 384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671										
JJ2VD1AD-SAMP Constituent List:										
BETA RDL:4 pCi/L LCL: UCL: RPD:										
JKDF01AA-BLK: BETA RDL:4 pCi/L LCL: UCL: RPD:										
JKDF01AC-LCS: Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20										
JJ2VD1AD-SAMP Calc Info:										
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2 ISV - Insufficient Volume for Analysis WO Cnt: 11										
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26										

12/18/2006 1:25:53 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

51 CLIENT: HANFORD

Balance Id:1120482733

Pipet #: *DEM*AnalyDueDate: 01/01/2007 *WJ5068*




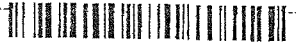
Batch: 6331351 WATER pCi/L

PM, Quote: SA, 57671

SEQ Batch, Test: None

Sep1 DT/Tm Tech: *12/19/06 2:59 PM*Sep2 DT/Tm Tech: *12/29/06 1:07 PM*

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2N9-1-AD J6K180149-3-SAMP 	1004.30g,in	srtb14281 12/05/06,pd 09/11/06,r	<i>1.647</i> <i>8.045</i> <i>0.8176</i>	<i>100</i>				<i>9"</i> <i>23</i> <i>3d</i>	<i>6602</i> <i>0927</i> <i>0909</i>	<i>12/29/06</i> <i>12/31/06</i> <i>12/31/06</i>	<i>K</i>
11/17/2006 09:46	AmtRec: 20ML,2X500ML,4XLP,4LP #Containers: 8		Scr: Alpha: 4.87E-03 uCi/Sa 3.3E-01L Beta: -4.18E-05 uCi/Sa								
2 JJ2N9-1-AG-X J6K180149-3-DUP 	1004.50g,in	srtb14282 12/05/06,pd 09/11/06,r	<i>1.749</i> <i>2.045</i> <i>0.8682</i>	<i>23.1</i>				<i>8"</i> <i>2c</i> <i>4A</i>	<i>6602</i> <i>0927</i> <i>0909</i>	<i>12/26/06</i> <i>12/31/06</i> <i>12/31/06</i>	<i>K</i>
11/17/2006 09:46	AmtRec: 20ML,2X500ML,4XLP,4LP #Containers: 8		Scr: Alpha: 4.87E-03 uCi/Sa 3.3E-01L Beta: -4.18E-05 uCi/Sa								
3 JJ2V1-1-AH J6K180164-3-SAMP 	1006.40g,in	srtb14283 12/05/06,pd 09/11/06,r	<i>1.817</i> <i>2.0297</i> <i>2.6489</i>	<i>23.6</i>				<i>9"</i> <i>2D</i> <i>4B</i>	<i>6636</i> <i>0927</i> <i>0909</i>	<i>12/26/06</i> <i>12/31/06</i> <i>12/31/06</i>	<i>K</i>
11/17/2006 11:05	AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11		Scr: Alpha: 6.29E-03 uCi/Sa Beta: -7.41E-04 uCi/Sa								
4 JJ2XD-1-AH J6K180164-7-SAMP 	1005.60g,in	srtb14284 12/05/06,pd 09/11/06,r	<i>1.770</i> <i>2.0144</i> <i>0.8187</i>	<i>23.3</i>				<i>3"</i> <i>3A</i> <i>4c</i>	<i>6636</i> <i>0927</i> <i>0909</i>	<i>12/26/06</i> <i>12/31/06</i> <i>12/31/06</i>	<i>K</i>
11/17/2006 10:14	AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11		Scr: Alpha: 3.37E-03 uCi/Sa Beta: -4.24E-03 uCi/Sa								

12/18/2006 1:25:54 PM

Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)

Pipet #: _____

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

5I CLIENT: HANFORD

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:



Batch: 6331351

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JKDGC-1-AA-B J6K270000-351-BLK 		1000.20g,in	sr1b14285 12/05/06,pd 09/11/06,r	1.560 2.0524 0.760			100		9" 0711 33 0907 4d 0909	10/20/06 12/3/06 12/31/06 n	
			YTA16692 Ex: 7/23/2007				23.9				
11/17/2006 09:46		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
6 JKDGC-1-AC-C J6K270000-351-LCS 		1000.90g,in	srs1293 12/18/06,pd 09/11/06,r	1.670 2.0259 0.8243			27		3" 0711 3L 0907 1A 1105	10/20/06 12/3/06 12/31/06 n	
			YTA16693 Ex: 7/23/2007				23.9				
11/17/2006 09:46		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments:

JH C2.0 9812-18-0

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2N91AD-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
JKDGC1AA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
JKDGC1AC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JJ2N91AD-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDGC1AA-BLK:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

12/18/2006 1:25:55 PM

Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)

Pipet #: _____

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

5I CLIENT: HANFORD

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech: _____

Batch: 6331351

pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N		Sci.Not.: Y	ODRs: B					
JKDGC1AC-LCS:											
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N		Sci.Not.: Y	ODRs: B					

Approved By _____ Date: _____

12/19/2006 9:41:07 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007





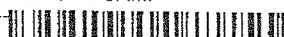
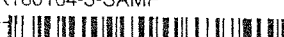
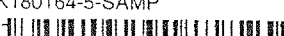
Sep1 DT/Tm Tech:

Batch: 6331348 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ *APA*

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2NX-1-AC J6K180149-1-SAMP 	1999.60g,in									
11/17/2006 08:19	AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7								
2 JJ2N2-1-AC J6K180149-2-SAMP 	2000.30g,in									
11/17/2006 08:58	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5								
3 JJ2N9-1-AC J6K180149-3-SAMP 	1999.80g,in									
11/17/2006 09:46	AmtRec: 20ML,2X500ML,4XLP,4LP	#Containers: 8								
4 JJ2TP-1-AC J6K180149-5-SAMP 	2003.00g,in									
11/17/2006 11:48	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5								
5 JJ2VN-1-AE J6K180164-2-SAMP 	2000.00g,in									
11/17/2006 12:00	AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5								
6 JJ2V1-1-AE J6K180164-3-SAMP 	1999.50g,in									
11/17/2006 11:05	AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11								
7 JJ2WR-1-AE J6K180164-5-SAMP 	2007.20g,in									
11/17/2006 07:00	AmtRec: 20ML,500ML,2XLP,3X4LP	#Containers: 7								

127

STL RICHLAND

12/19/2006 9:41:09 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017

TA Gamma by HPGE

5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331348 WATER

pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JJ2W4-1-AE J6K180164-6-SAMP 11/17/2006 08:31	1950.20g,in				100mL 100		64	0855	12/07/06 JB	
			AmtRec: 20ML,500ML,2XLP,3X4LP	#Containers: 7				Scr: Alpha: 2.27E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
9 JJ2W4-1-AH-X J6K180164-6-DUP 11/17/2006 08:31	1882.70g,in						65	0855		
			AmtRec: 20ML,500ML,2XLP,3X4LP	#Containers: 7				Scr: Alpha: 2.27E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
10 JJ2XD-1-AE J6K180164-7-SAMP 11/17/2006 10:14	2005.10g,in						66	0855		
			AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11				Scr: Alpha: 3.37E-03 uCi/Sa	Beta: -4.24E-03 uCi/Sa	
11 JKDF4-1-AA-B J6K270000-348-BLK 11/17/2006 08:31	2000.40g,in						68	0856		
			AmtRec: #Containers: 1					Scr: Alpha:	Beta:	
12 JKDF4-1-AC-C J6K270000-348-LCS 11/17/2006 08:31	1999.90g,in		QCAG1309 11/07/06,pd 06/14/05,r				67	0856		
			AmtRec: #Containers: 1					Scr: Alpha:	Beta:	

Comments: JJ2W4-SAMP "Comments. Dup. not full 2,000 ml. aliquot due to insufficient sample amount. JB 12/19/06 "

8A 2.0 g 12-19-06

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2NX1AC-SAMP Constituent List:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 12
Prep_SamplePrep v4.8.26

128

12/19/2006 9:41:10 AM

Sample Preparation/Analysis

Balance Id:1120482733

AW Gamma PrpRC5017

TA Gamma by HPGE

51 CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331348

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
JKDF41AA-BLK:											
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
JKDF41AC-LCS:											
Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						
JJ2NX1AC-SAMP Calc Info:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			
JKDF41AA-BLK:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			
JKDF41AC-LCS:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			

Approved By _____ Date: _____

12/21/2006 11:45:43 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

51 CLIENT: HANFORD

Balance Id:2113224201

Pipet #:

AnalyDueDate: 01/01/2007

W05068

Batch: 6331352

WATER

pCi/L




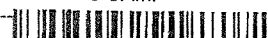
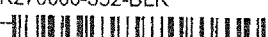
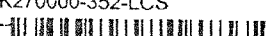
PM, Quote: SA , 57671

SEQ Batch, Test: None All Tests: 6331331 ARS6, 6331338 AAS4, 6331339 FPS5, 6331345 AZS7, 6331346 BCS8, 6331348 AWTA, 6331349 H3TB, 6331351 CLTL, 6331352 BNTB.

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BostedD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2WH-1-AC J6K180164-4-SAMP 	3846.80g,in	ITA5813	11/10/06			33.0 100	L2	1455	1/3/07 CHD	
11/17/2006 09:35	AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5		Scr:		Alpha: -8.67E-04 uCi/Sa		Beta: 7.37E-04 uCi/Sa	
2 JJ2WR-1-AF J6K180164-5-SAMP 	3819.00g,in	ITA5881	12/20/06			34.2	L4	1656		
11/17/2006 07:00	AmtRec: 20ML,500ML,2XLP,3X4LP		#Containers: 7		Scr:		Alpha: 2.30E-03 uCi/Sa		Beta: -1.26E-03 uCi/Sa	
3 JJ2WR-1-AJ-X J6K180164-5-DUP 	3829.70g,in	ITA5882	12/20/06			31.8	L5	1657		
11/17/2006 07:00	AmtRec: 20ML,500ML,2XLP,3X4LP		#Containers: 7		Scr:		Alpha: 2.30E-03 uCi/Sa		Beta: -1.26E-03 uCi/Sa	
4 JJ2W4-1-AF J6K180164-6-SAMP 	3897.60g,in	ITA5883	12/20/06			34.3	L2	1840		
11/17/2006 08:31	AmtRec: 20ML,500ML,2XLP,3X4LP		#Containers: 7		Scr:		Alpha: 2.27E-03 uCi/Sa		Beta: -2.49E-03 uCi/Sa	
5 JKDGG-1-AA-B J6K270000-352-BLK 	3687.10g,in	ITA5884	12/20/06			34.4	L4	1841		
11/17/2006 07:00	AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:	
6 JKDGG-1-AC-C J6K270000-352-LCS 	3792.50g,in	ISD0704	12/14/06,pd 11/17/04,r			36.7 ✓	L5	1841	0	
11/17/2006 07:00	AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:	

STL RICHLAND

12/21/2006 11:45:45 AM

Sample Preparation/Analysis

Balance Id:2113224201

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331352

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BostedD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: JJ2W4-SAMP Comments

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2WH1AC-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JKDGG1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JKDGG1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

JJ2WH1AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JKDGG1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JKDGG1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

STL RICHLAND

12/29/2006 12:13:12 PM

Sample Preparation/Analysis

Balance Id:2113224201

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

Pipet #:

AnalyDueDate: 01/01/2007 W05068

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 6360197 WATER pCi/L PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6331331 ARS6, 6331338 AAS4, 6331339 FPS5, 6331345 AZS7, 6331346 BCS8, 6331348 AWTA,
6331349 H3TB, 6331351 CLTL, 6331352 BNTB, 6360197 BNTB,

Prep Tech: ,BostedD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2V1-1-AM J6K180164-3-SAMP 11/17/2006 11:05	3922.30g,in	ita5872 12/20/06		32.0	100	L5	2046	1/3/0708		
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 6.29E-03 uCi/Sa Beta: -7.41E-04 uCi/Sa										
2 JJ2V1-1-AN-X J6K180164-3-DUP 11/17/2006 11:05	3913.70g,in	ita5873 12/20/06		32.1		L4	2047			
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 6.29E-03 uCi/Sa Beta: -7.41E-04 uCi/Sa										
3 JJ2XD-1-AK J6K180164-7-SAMP 11/17/2006 10:14	3855.50g,in	ita5874 12/20/06		35.4		L2	2047			
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 3.37E-03 uCi/Sa Beta: -4.24E-03 uCi/Sa										
4 JL43T-1-AA-B J6L260000-197-BLK 11/17/2006 11:05	3403.20g,in	ita5875 12/20/06		33.3		L2	0626			
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
5 JL43T-1-AC-C J6L260000-197-LCS 11/17/2006 11:05	3589.20g,in	isd0706 12/14/06,pd 11/17/04,r		35.5		L4	0027			
AmtRec: #Containers: 1 Scr: Alpha: Beta:										

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JJ2V11AM-SAMP Constituent List:

I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 5

Prep_SamplePrep v4.8.26

132

12/18/2006 12:42:53 PM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/01/2007 1050108




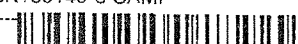
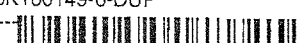
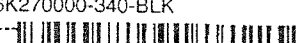

Batch: 6331340 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2NX-1-AD J6K180149-1-SAMP 	125.30g,in			60				
11/17/2006 08:19	AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7				Scr: Alpha: 4.62E-03 uCi/Sa	3.3E-01L	Beta: -4.01E-05 uCi/Sa
2 JJ2PK-1-AC J6K180149-4-SAMP 	125.40g,in							
11/17/2006 11:02	AmtRec: 20ML,2X500ML,4XLP	#Containers: 6				Scr: Alpha: 2.73E-04 uCi/Sa		Beta: -6.05E-04 uCi/Sa
3 JJ2PK-1-AE-S J6K180149-4-MS 	126.80g,in	tcsg1727 12/06/06,pd 01/10/06,r						
11/17/2006 11:02	AmtRec: 20ML,2X500ML,4XLP	#Containers: 6				Scr: Alpha: 2.73E-04 uCi/Sa		Beta: -6.05E-04 uCi/Sa
4 JJ2TT-1-AC J6K180149-6-SAMP 	125.20g,in							
11/17/2006 13:00	AmtRec: 20ML,500ML,4XLP	#Containers: 6				Scr: Alpha: 4.14E-04 uCi/Sa		Beta: -4.98E-04 uCi/Sa
5 JJ2TT-1-AE-X J6K180149-6-DUP 	127.00g,in							
11/17/2006 13:00	AmtRec: 20ML,500ML,4XLP	#Containers: 6				Scr: Alpha: 4.14E-04 uCi/Sa		Beta: -4.98E-04 uCi/Sa
6 JKDFR-1-AA-B J6K270000-340-BLK 	125.90g,in							
11/17/2006 13:00	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
7 JKDFR-1-AC-C J6K270000-340-LCS 	126.50g,in	tcse2039 12/06/06,pd 01/10/06,r		✓				
11/17/2006 13:00	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

737

12/18/2006 12:42:57 PM

Sample Preparation/Analysis

Balance Id:

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331340

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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8 JKDFR-1-AD-BN

J6K270000-340-IBLK



11/17/2006 13:00

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

PH L2.0 9B 12-18-04

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2NX1AD-SAMP Constituent List:

Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20

JJ2PK1AE-MS:

JKDFR1AA-BLK:

Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JKDFR1AC-LCS:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JKDFR1AD-IBLK:

Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JJ2NX1AD-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JJ2PK1AE-MS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFR1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFR1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFR1AD-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 8

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

12/18/2006 12:56:03 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007 *W05068*

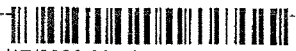
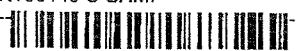





Sep1 DT/Tm Tech:

Batch: 6331339 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2N2-1-AD J6K180149-2-SAMP 			125.50g,in	125.50g						
11/17/2006 08:58			AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				Scr: Alpha: 1.51E-03 uCi/Sa	Beta: 4.67E-04 uCi/Sa	
2 JJ2N9-1-AE J6K180149-3-SAMP 			124.90g,in	124.90g						
11/17/2006 09:46			AmtRec: 20ML,2X500ML,4XLP,4LP	#Containers: 8				Scr: Alpha: 4.87E-03 uCi/Sa 3.3E-01L	Beta: -4.18E-05 uCi/Sa	
3 JJ2TP-1-AD J6K180149-5-SAMP 			126.10g,in	126.10g						
11/17/2006 11:48			AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				Scr: Alpha: 1.69E-03 uCi/Sa	Beta: -4.54E-04 uCi/Sa	
4 JJ2VD-1-AE J6K180164-1-SAMP 			125.70g,in	125.70g						
11/17/2006 13:02			AmtRec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: -8.37E-05 uCi/Sa	Beta: -2.47E-04 uCi/Sa	
5 JJ2VD-1-AF-X J6K180164-1-DUP 			124.90g,in	124.90g						
11/17/2006 13:02			AmtRec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: -8.37E-05 uCi/Sa	Beta: -2.47E-04 uCi/Sa	
6 JJ2VN-1-AF J6K180164-2-SAMP 			125.30g,in	125.30g						
11/17/2006 12:00			AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5				Scr: Alpha: -3.39E-04 uCi/Sa	Beta: 5.82E-04 uCi/Sa	
7 JJ2VN-1-AG-S J6K180164-2-MS 			127.60g,in	127.60g	tcsg1728 12/06/06.pd 01/10/06.r					
11/17/2006 12:00			AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5				Scr: Alpha: -3.39E-04 uCi/Sa	Beta: 5.82E-04 uCi/Sa	

12/18/2006 12:56:05 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331339 WATER

pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JJ2V1-1-AJ J6K180164-3-SAMP 11/17/2006 11:05			126.00g,in	126.00g		60				
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11										
								Scr: Alpha: 6.29E-03 uCi/Sa	Beta: -7.41E-04 uCi/Sa	
9 JJ2WH-1-AD J6K180164-4-SAMP 11/17/2006 09:35			126.40g,in	126.40g						
AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5										
								Scr: Alpha: -8.67E-04 uCi/Sa	Beta: 7.37E-04 uCi/Sa	
10 JJ2WR-1-AG J6K180164-5-SAMP 11/17/2006 07:00			125.90g,in	125.90g						
AmtRec: 20ML,500ML,2XLP,3X4LP #Containers: 7										
								Scr: Alpha: 2.30E-03 uCi/Sa	Beta: -1.26E-03 uCi/Sa	
11 JJ2W4-1-AG J6K180164-6-SAMP 11/17/2006 08:31			125.50g,in	125.50g						
AmtRec: 20ML,500ML,2XLP,3X4LP #Containers: 7										
								Scr: Alpha: 2.27E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
12 JJ2XD-1-AJ J6K180164-7-SAMP 11/17/2006 10:14			125.80g,in	125.80g						
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11										
								Scr: Alpha: 3.37E-03 uCi/Sa	Beta: -4.24E-03 uCi/Sa	
13 JKDFL-1-AA-B J6K270000-339-BLK 11/17/2006 13:02			125.40g,in	125.40g						
AmtRec: #Containers: 1										
								Scr: Alpha:	Beta:	
14 JKDFL-1-AC-C J6K270000-339-LCS 11/17/2006 13:02			124.80g,in	124.80g	tcse2040 12/06/06,pd 01/10/06,r					
AmtRec: #Containers: 1										
								Scr: Alpha:	Beta:	

12/18/2006 12:56:06 PM

Sample Preparation/Analysis

Balance Id:

FP Tc-99 Prp/SepRC5065

Pipet #:

S5 Technetium-99 by Liquid Scint

SI CLIENT: HANFORD

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331339

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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15 JKDFL-1-AD-BN

J6K270000-339-IBLK



11/17/2006 13:02

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

16 JKDFL-1-AE-BN

J6K270000-339-IBLK



11/17/2006 13:02

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments: PH < 2.0 9312-18-0

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JJ2N21AD-SAMP Constituent List:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JJ2VN1AG-MS:

JKDFL1AA-BLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JKDFL1AC-LCS:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JKDFL1AD-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JKDFL1AE-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JJ2N21AD-SAMP Calc Info:

JJ2VN1AG-MS: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JJ2VN1AG-MS: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFL1AA-BLK: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFL1AC-LCS: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFL1AD-IBLK: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFL1AE-IBLK: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3

ISV - Insufficient Volume for Analysis

WO Cnt: 16

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

11/27/2006 1:26:28 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAnalyDueDate: 01/01/2007 *W0500*

Batch: 6331331 WATER

pCi/L

SEQ Batch, Test: None

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORDBalance Id: *12445*







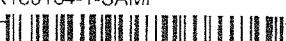
Pipet #:

Sep1 DT/Tm Tech: *12-14-08000*

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2NX-1-AA J6K180149-1-SAMP  11/17/2006 08:19								
		AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7			Scr:	Alpha:	Beta:
2 JJ2N2-1-AA J6K180149-2-SAMP  11/17/2006 08:58								
		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
3 JJ2N9-1-AA J6K180149-3-SAMP  11/17/2006 09:46								
		AmtRec: 20ML,2X500ML,4XLP,4LP	#Containers: 8			Scr:	Alpha:	Beta:
4 JJ2PK-1-AA J6K180149-4-SAMP  11/17/2006 11:02								
		AmtRec: 20ML,2X500ML,4XLP	#Containers: 6			Scr:	Alpha:	Beta:
5 JJ2TP-1-AA J6K180149-5-SAMP  11/17/2006 11:48								
		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
6 JJ2TT-1-AA J6K180149-6-SAMP  11/17/2006 13:00								
		AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha:	Beta:
7 JJ2VD-1-AA J6K180164-1-SAMP  11/17/2006 13:02								
		AmtRec: 20ML,500ML,2XLP	#Containers: 4			Scr:	Alpha:	Beta:

STL RICHLAND

11/27/2006 1:26:28 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
SI CLIENT: HANFORD

Balance Id: 124415

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech: 12-14-000m

Batch: 6331331 WATER



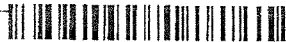


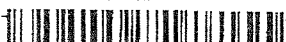

pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JJ2VN-1-AA J6K180164-2-SAMP 								
11/17/2006 12:00		AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
9 JJ2V1-1-AA J6K180164-3-SAMP 								
11/17/2006 11:05		AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11			Scr:	Alpha:	Beta:
10 JJ2WH-1-AA J6K180164-4-SAMP 								
11/17/2006 09:35		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
11 JJ2WR-1-AA J6K180164-5-SAMP 								
11/17/2006 07:00		AmtRec: 20ML,500ML,2XLP,3X4LP	#Containers: 7			Scr:	Alpha:	Beta:
12 JJ2W4-1-AA J6K180164-6-SAMP 								
11/17/2006 08:31		AmtRec: 20ML,500ML,2XLP,3X4LP	#Containers: 7			Scr:	Alpha:	Beta:
13 JJ2XD-1-AA J6K180164-7-SAMP 								
11/17/2006 10:14		AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11			Scr:	Alpha:	Beta:
14 JJ620-1-AA J6K210263-1-SAMP 								
11/20/2006 11:03		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:

11/27/2006 1:26:28 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ;
Pacific Northwest National LabAR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech: 12-14-06

Batch: 6331331 WATER








pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15JJ620-1-AC-X J6K210263-1-DUP  11/20/2006 11:03								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
16JJ623-1-AA J6K210263-2-SAMP  11/20/2006 11:49								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
17JJ626-1-AA J6K210263-3-SAMP  11/20/2006 10:15								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
18JKDE3-1-AA-B J6K270000-331-BLK  11/20/2006 11:03								
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
19JKDE3-1-AC-C J6K270000-331-LCS  11/20/2006 11:03								
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
20JKDE3-1-AD-BX J6K270000-331-MBLK  11/20/2006 11:03								
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
21JKDE3-1-AE-CM J6K270000-331-MLCS  11/20/2006 11:03								
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

11/27/2006 1:26:29 PM

Sample Preparation/Analysis

Balance Id:

12425

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

12-14-06

Batch: 6331331

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

22JKDE3-1-AF-BN

J6K270000-331-IBLK



11/20/2006 11:03

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

23JKDE3-1-AG-BN

J6K270000-331-IBLK



11/20/2006 11:03

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

24JKDE3-1-AH-BN

J6K270000-331-IBLK



11/20/2006 11:03

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JJ2NX1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JKDE31AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JKDE31AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JKDE31AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JKDE31AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JKDE31AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JKDE31AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 4

ISV - Insufficient Volume for Analysis

WO Cnt: 24

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.24

141

11/27/2006 1:26:30 PM

Sample Preparation/Analysis

Balance Id: 12465

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
51 CLIENT: HANFORD

Pipet #:

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech: 12-14-06

Batch: 6331331

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

JKDE31AH-IBLK:

H-3 RDL:400 pCi/L LCL: UCL: RPD:

JJ2NX1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AD-MBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AE-MLCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AF-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AG-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDE31AH-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

12/19/2006 2:04:57 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabAA Ni-63 PrpRC5016, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331338 WATER

pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2V1-1-AG J6K180164-3-SAMP 11/17/2006 11:05			401.50g,in	401.50g	NITA2336 12/19/06	100				
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 6.29E-03 uCi/Sa Beta: -7.41E-04 uCi/Sa										
2 JJ2V1-1-AK-X J6K180164-3-DUP 11/17/2006 11:05			399.20g,in	399.20g	NITA2337 12/19/06					
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 6.29E-03 uCi/Sa Beta: -7.41E-04 uCi/Sa										
3 JJ2XD-1-AG J6K180164-7-SAMP 11/17/2006 10:14			400.60g,in	400.60g	NITA2338 12/19/06					
AmtRec: 20ML,500ML,6XLP,3X4LP #Containers: 11 Scr: Alpha: 3.37E-03 uCi/Sa Beta: -4.24E-03 uCi/Sa										
4 JKDFH-1-AA-B J6K270000-338-BLK 11/17/2006 11:05			399.90g,in	399.90g	NITA2339 12/19/06					
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
5 JKDFH-1-AC-C J6K270000-338-LCS 11/17/2006 11:05			400.90g,in	400.90g	NISA0742 12/19/06					
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
6 JKDFH-1-AD-BN J6K270000-338-IBLK 11/17/2006 11:05										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										

12/19/2006 2:04:59 PM

Sample Preparation/Analysis

Balance Id:

AA Ni-63 PrpRC5016, SepRC5069

Pipet #: _____

S4 Nickel by ICP and Nickel-63 by Liquid Scint

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

AnalyDueDate: 01/01/2007

Sep2 DT/Tm Tech:

Batch: 6331338

pCi/L

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: 2# L2-0 9812-19-04

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2V11AG-SAMP Constituent List:

Ni-63 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JKDFH1AA-BLK:

Ni-63 RDL:15 pCi/L LCL: UCL: RPD:

JKDFH1AC-LCS:

Ni-63 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JKDFH1AD-IBLK:

Ni-63 RDL:15 pCi/L LCL: UCL: RPD:

JJ2V11AG-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFH1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFH1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JKDFH1AD-IBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

STL RICHLAND

12/19/2006 7:18:51 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015

SS Total Uranium by KPA

Pipet #: _____

AnalyDueDate: 01/01/2007 W05068

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 6331335 WATER ug/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6331331 ARS6, 6331335 DHSS, 6331339 FPS5, 6331340 AMS5, 6331348 AWTA, 6331351 CLTL,

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JJ2NX-1-AE J6K180149-1-SAMP 11/17/2006 08:19	25.30g,in							
AmtRec: 20ML,500ML,4XLP,4LP #Containers: 7 Scr: Alpha: 4.62E-03 uCi/Sa 3.3E-01L Beta: -4.01E-05 uCi/Sa								
2 JJ2NX-1-AF-X J6K180149-1-DUP 11/17/2006 08:19	25.00g,in							
AmtRec: 20ML,500ML,4XLP,4LP #Containers: 7 Scr: Alpha: 4.62E-03 uCi/Sa 3.3E-01L Beta: -4.01E-05 uCi/Sa								
3 JJ2N2-1-AE J6K180149-2-SAMP 11/17/2006 08:58	25.60g,in							
AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 1.51E-03 uCi/Sa Beta: 4.67E-04 uCi/Sa								
4 JJ2N2-1-AF-S J6K180149-2-MS 11/17/2006 08:58	25.40g,in		UNSF3489 12/14/06,pd 03/22/05,r					
AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 1.51E-03 uCi/Sa Beta: 4.67E-04 uCi/Sa								
5 JJ2N9-1-AF J6K180149-3-SAMP 11/17/2006 09:46	25.50g,in							
AmtRec: 20ML,2X500ML,4XLP,4LP #Containers: 8 Scr: Alpha: 4.87E-03 uCi/Sa 3.3E-01L Beta: -4.18E-05 uCi/Sa								
6 JJ2PK-1-AD J6K180149-4-SAMP 11/17/2006 11:02	25.70g,in							
AmtRec: 20ML,2X500ML,4XLP #Containers: 6 Scr: Alpha: 2.73E-04 uCi/Sa Beta: -6.06E-04 uCi/Sa								
7 JJ2TP-1-AE J6K180149-5-SAMP 11/17/2006 11:48	25.70g,in							
AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 1.69E-03 uCi/Sa Beta: -4.54E-04 uCi/Sa								

45

12/19/2006 7:18:54 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015

SS Total Uranium by KPA

5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331335 WATER

ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JJ2TT-1-AD J6K180149-6-SAMP 11/17/2006 13:00	25.60g,in							
<div>AmtRec: 20ML,500ML4XLP #Containers: 6</div> <div>Scr: Alpha: 4.14E-04 uCi/Sa Beta: -4.98E-04 uCi/Sa</div>								
9 JJ6KT-1-AA J6K210219-2-SAMP 11/20/2006 10:29	25.60g,in							
<div>AmtRec: 20ML,500MLP #Containers: 2</div> <div>Scr: Alpha: 2.73E-11 uCi/Sa Beta: -2.50E-11 uCi/Sa</div>								
10 JJ6K2-1-AA J6K210219-3-SAMP 11/20/2006 09:42	25.30g,in							
<div>AmtRec: 20ML,500MLP #Containers: 2</div> <div>Scr: Alpha: 3.66E-11 uCi/Sa Beta: 3.38E-11 uCi/Sa</div>								
11 JJ6K8-1-AA J6K210219-4-SAMP 11/20/2006 09:04	26.00g,in							
<div>AmtRec: 20ML,500MLP #Containers: 2</div> <div>Scr: Alpha: 4.74E-11 uCi/Sa Beta: -8.40E-11 uCi/Sa</div>								
12 JKDE8-1-AA-B J6K270000-335-BLK 11/17/2006 08:19	26.30g,in							
<div>AmtRec: #Containers: 1</div> <div>Scr: Alpha: Beta:</div>								
13 JKDE8-1-AC-C J6K270000-335-LCS 11/17/2006 08:19	25.50g,in		UNSF3490 12/14/06,pd 03/22/05,r					
<div>AmtRec: #Containers: 1</div> <div>Scr: Alpha: Beta:</div>								
14 JKDE8-1-AD-C J6K270000-335-LCS 11/17/2006 08:19	25.20g,in		UNSC1434 12/05/06,pd 04/28/06,r					
<div>AmtRec: #Containers: 1</div> <div>Scr: Alpha: Beta:</div>								

STL RICHLAND

12/19/2006 7:18:56 AM

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015

Pipet #: _____

SS Total Uranium by KPA

SI CLIENT: HANFORD

AnalyDueDate: 01/01/2007

Sep1 DT/Tm Tech:

Batch: 6331335

ug/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: PH L2.0 9612-19-06

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JJ2NX1AE-SAMP Constituent List:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
JJ2N21AF-MS:					
JKDE81AA-BLK:					
Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
JKDE81AC-LCS:					
Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
JKDE81AD-LCS:					
Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
JJ2NX1AE-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JJ2N21AF-MS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JKDE81AA-BLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JKDE81AC-LCS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JKDE81AD-LCS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	

Approved By _____

Date: _____

1/2/2007 10:42:48 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/2/2006, 1/7/2007, Batch: '6331345', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331345				
AC	CalcC	BockJ	12/19/2006 1:11:53	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	Prep1C 12/19/2006 1:11:53 PM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 12/27/2006 6:40:59 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C 12/29/2006 2:07:11 PM	RICH-RC-5014 REVISION 6
SC		DAWKINSO	InCnt1 12/29/2006 2:36:31 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 12/29/2006 7:33:38 PM	RICH-RD-0003 REVISION 4
AC		AshworthA	12/27/2006 6:40:59	
AC		AshworthA	12/29/2006 2:07:11	
AC		DAWKINSO	12/29/2006 2:36:31	
AC		DAWKINSO	12/29/2006 7:33:38	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

1/9/2007 4:40:28 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/9/2006, 1/14/2007, Batch: '7003498', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7003498				
AC	CalcC	BockJ	1/4/2007 1:50:26 PM	
SC		andersonp	IsBatched	1/3/2007 3:12:25 PM
SC		BockJ	Prep1C	1/4/2007 1:50:26 PM
SC		AshworthA	InPrep2	1/5/2007 8:40:36 AM
SC		AshworthA	Prep2C	1/9/2007 11:29:18 AM
SC		BlackCL	InCnt1	1/9/2007 11:34:11 AM
SC		BlackCL	CalcC	1/9/2007 2:17:22 PM
AC		BockJ	1/4/2007 1:50:33 PM	ICOC_RADCALC v4.8.26
AC		AshworthA	1/5/2007 8:40:36 AM	RICH-RC-5014 REVISION 6
AC		AshworthA	1/9/2007 11:29:18	RICH-RC-5014 REVISION 6
AC		BlackCL	1/9/2007 11:34:11	RICH-RC-5014 REVISION 6
AC		BlackCL	1/9/2007 2:17:22 PM	RICH-RD-0003 REVISION 4

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.26

STL RICHLAND

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1/9/2007 4:41:03 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/9/2006, 1/14/2007, Batch: '6331346', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331346				
AC	CalcC	BockJ	12/19/2006 12:59:40	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	Prep1C 12/19/2006 12:59:40 PM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 12/27/2006 6:41:08 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C 12/29/2006 2:07:18 PM	RICH-RC-5014 REVISION 6
SC		DAWKINSO	InCnt1 12/29/2006 2:36:23 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 12/29/2006 6:49:27 PM	RICH-RD-0003 REVISION 4
SC		BlackCL	InCnt1 1/2/2007 8:38:16 AM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 1/2/2007 4:47:35 PM	RICH-RD-0003 REVISION 4
AC		AshworthA	12/27/2006 6:41:08	
AC		AshworthA	12/29/2006 2:07:18	
AC		DAWKINSO	12/29/2006 2:36:23	
AC		DAWKINSO	12/29/2006 6:49:27	
AC		BlackCL	1/2/2007 8:38:16 AM	
AC		DAWKINSO	1/2/2007 4:47:35 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

1/2/2007 10:47:04 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/2/2006, 1/7/2007, Batch: '6331351', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331351				
AC	CalcC	BockJ	12/18/2006 1:10:35	
SC		wagarr	IsBatched	11/27/2006 1:29:23 PM
SC		BockJ	InPrep	12/18/2006 1:10:35 PM
SC		BockJ	Prep1C	12/18/2006 1:25:59 PM
SC		ManisD	Sep1C	12/19/2006 3:31:58 PM
SC		DAWKINSO	InCnt1	12/19/2006 3:37:35 PM
SC		StringerR	Cnt1C	12/20/2006 7:15:17 AM
SC		FABREM	Sep2C	12/29/2006 6:20:36 PM
SC		DAWKINSO	InCnt2	12/29/2006 6:37:13 PM
SC		StringerR	CalcC	12/31/2006 11:31:13 AM
AC		BockJ	12/18/2006 1:25:59	
AC		ManisD	12/19/2006 3:31:58	
AC		DAWKINSO	12/19/2006 3:37:35	
AC		StringerR	12/20/2006 7:15:17	
AC		FABREM	12/29/2006 6:20:36	
AC		DAWKINSO	12/29/2006 6:37:13	
AC		StringerR	12/31/2006 11:31:13	

AC: Accepting Entry; SC: Status Change

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12/27/2006 2:16:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/27/2005, 1/1/2007, Batch: '6331348', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
6331348					
AC		CalcC	BockJ	12/19/2006 9:42:47	
SC			wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC			BockJ	Prep1C 12/19/2006 9:42:47 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	Prep2C 12/26/2006 8:16:28 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1 12/26/2006 8:31:19 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC 12/27/2006 9:08:28 AM	RICH-RD-0007 REVISION 5
AC			AshworthA	12/26/2006 8:16:28	
AC			DAWKINSO	12/26/2006 8:31:19	
AC			BlackCL	12/27/2006 9:08:28	

AC: Accepting Entry; SC: Status Change

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1/8/2007 4:12:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/8/2006, 1/13/2007, Batch: '6331352', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331352				
AC	CalcC	BostedD	12/20/2006 11:06:25	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BostedD	InPrep 12/20/2006 11:06:25 AM	RICHRC5025 REV3
SC		DAWKINSO	InCnt1 1/3/2007 3:13:54 PM	RICH-RD-0007 REVISION 5
SC		DAWKINSO	CalcC 1/3/2007 7:42:21 PM	RICH-RD-0007 REVISION 5
AC		DAWKINSO	1/3/2007 3:13:54 PM	
AC		DAWKINSO	1/3/2007 7:42:21 PM	

AC: Accepting Entry; SC: Status Change

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1/8/2007 4:08:06 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/8/2006, 1/13/2007, Batch: '6360197', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6360197				
AC	CalcC	BostedD	1/3/2007 7:49:24 AM	
SC		bostedd	IsBatched 12/29/2006 8:53:53 AM	ICOC_RADCALC v4.8.26
SC		BostedD	InPrep 1/3/2007 7:49:24 AM	RICHRC5025 REV3
SC		DAWKINSO	InCnt1 1/3/2007 3:13:47 PM	RICH-RD-0007 REVISION 5
SC		BlackCL	CalcC 1/4/2007 8:01:03 AM	RICH-RD-0007 REVISION 5
AC		DAWKINSO	1/3/2007 3:13:47 PM	
AC		BlackCL	1/4/2007 8:01:03 AM	

AC: Accepting Entry; SC: Status Change

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12/26/2006 3:06:46 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/26/2005, 12/31/2006, Batch: '6331340', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331340				
AC	CalcC	BockJ	12/18/2006 12:37:56	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	InPrep 12/18/2006 12:37:56 PM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 12/18/2006 12:42:58 PM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 12/22/2006 4:09:52 PM	RICH-RC-5078 REVISION 3
SC		DAWKINSO	InCnt1 12/22/2006 4:20:03 PM	RICH-RD-0001 REVISION 3
SC		StringerR	CalcC 12/24/2006 11:23:16 AM	RICH-RD-0001 REVISION 3
AC		BockJ	12/18/2006 12:42:58	
AC		FABREM	12/22/2006 4:09:52	
AC		DAWKINSO	12/22/2006 4:20:03	
AC		StringerR	12/24/2006 11:23:16	

AC: Accepting Entry; SC: Status Change

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12/22/2006 2:14:46 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/22/2005, 12/27/2006, Batch: '6331339', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331339				
AC	CalcC	BockJ	12/18/2006 12:45:41	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	InPrep 12/18/2006 12:45:41 PM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 12/18/2006 12:56:11 PM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 12/20/2006 4:32:30 PM	RICH-RC-5065 REVISION 5
SC		DAWKINSO	InCnt1 12/20/2006 4:36:13 PM	RICH-RD-0001 REVISION 3
SC		StringerR	CalcC 12/22/2006 1:14:45 PM	RICH-RD-0001 REVISION 3
AC		BockJ	12/18/2006 12:56:11	
AC		FABREM	12/20/2006 4:32:30	
AC		DAWKINSO	12/20/2006 4:36:13	
AC		StringerR	12/22/2006 1:14:45	

AC: Accepting Entry; SC: Status Change

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ICOC Fraction Transfer/Status Report

ByDate: 12/26/2005, 12/31/2006, Batch: '6331331', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331331				
AC	CalcC	McDowellID	12/14/2006 8:43:55	
SC		wagarr	IsBatched	11/27/2006 1:29:23 PM
SC		McDowellID	InSep1	12/14/2006 8:43:55 AM
SC		McDowellID	Sep1C	12/15/2006 11:34:34 AM
SC		StringerR	InCnt1	12/15/2006 11:39:32 AM
SC		BlackCL	CalcC	12/18/2006 9:04:09 AM
AC		McDowellID	12/15/2006 11:34:34	
AC		StringerR	12/15/2006 11:39:32	
AC		BlackCL	12/18/2006 9:04:09	

ICOC_RADCALC v4.8.24
RICH-RC-5007 REVISION 6
RICH-RC-5007 REVISION 6
RICH-RD-0001 REVISION 3
RICH-RD-0001 REVISION 3

AC: Accepting Entry; SC: Status Change

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ICOC Fraction Transfer/Status Report

ByDate: 12/27/2005, 1/1/2007, Batch: '6331338', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331338				
AC	CalcC	BockJ	12/19/2006 2:05:04	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	Prep1C 12/19/2006 2:05:04 PM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 12/22/2006 4:09:13 PM	RICH-RC-5069 REVISION 5
SC		DAWKINSO	InCnt1 12/22/2006 4:20:08 PM	RICH-RD-0001 REVISION 3
SC		DAWKINSO	CalcC 12/26/2006 7:24:53 PM	RICH-RD-0001 REVISION 3
AC		FABREM	12/22/2006 4:09:13	
AC		DAWKINSO	12/22/2006 4:20:08	
AC		DAWKINSO	12/26/2006 7:24:53	

AC: Accepting Entry; SC: Status Change

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1/8/2007 4:05:22 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/8/2006, 1/13/2007, Batch: '6331335', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
6331335				
AC		Cnt1C	BockJ 12/19/2006 7:19:17	
SC		wagarr	IsBatched 11/27/2006 1:29:23 PM	ICOC_RADCALC v4.8.24
SC		BockJ	Prep1C 12/19/2006 7:19:17 AM	RICH-RC-5015 REVISION 4
SC		AntonsonL	InSep1 12/26/2006 2:43:59 PM	RICH-RC-5015 REVISION 4
SC		AntonsonL	Sep1C 1/2/2007 3:03:56 PM	RICH-RC-5015 REVISION 4
SC		NelsonT	Cnt1C 1/4/2007 9:17:47 AM	RICH-RC-5058 REV 7
AC		AntonsonL	12/26/2006 2:43:59	
AC		AntonsonL	1/2/2007 3:03:56 PM	
AC		NelsonT	1/4/2007 9:17:47 AM	

AC: Accepting Entry; SC: Status Change

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